A HISTORY

OF

ROWING IN AMERICA,

BY ROBERT B. JOHNSON,

CONTAINING

A TREATISE ON ROWING, TRAINING AND EXERCISE, WITH ALL NECESSARY INFORMATION FOR AMATEUR AND PROFESSIONAL OARSMEN.

ALSO

A HISTORY OF ROWING: ITS INTRODUCTION AND DEVELOPMENT IN AMERICA, BIOGRAPHICAL SKETCHES OF PROMINENT OARSMEN, DESCRIPTION OF BOAT-BUILDING, DICTIONARY OF BOATING TERMS, ETC., ETC., WITH CONTRIBUTIONS FROM

WILLIAM BLAIKIE, JOSHUA WARD, C. P. KUNHARDT, BENJ. F. BRADY, STEPHEN ROBERTS, A. McC. DUNCAN, ROBERT FULTON.

MILWAUKEE.
CORBITT & JOHNSON, PUBLISHERS.
.....
1871.

TO

WILLIAM BLAIKIE,
BOSTON.

BENJ. F. BRADY,
NEW YORK.

Two honorable and honored American Amateur Club and College Oarsmen, this Work is inscribed, as a slight recognition of their noble efforts in behalf of American Rowing, and as a mark of personal esteem, by

THE AUTHOR.

ACKNOWLEDGMENT.

It is with the greatest pleasure that, in placing this Work before the Rowing Men of America, I am able to mention the names of a few who have cheerfully given all the assistance in their power, with no other reward than the knowledge of having done all that in them lay, to advance the cause of Rowing in America.

If the Work is not popular, it will not be because the Rowing Men of the country neglected to try and make it so.

To the following gentlemen, then, I return my sincere thanks as well as to a hundred others, some of whom I am not at liberty to mention:—

WILLIAM BLAIKIE,.....Boston, Mass.
BENJAMIN F. BRADY,.....New York City.
JOSHUA WARD,.....Cornwall, N. Y.
STEPHEN ROBERTS,.....New York City.
C. P. KUNHARDT,.....United States Navy.
J. H. GIRVIN,.....Albany, N. Y.
J. HARRY LEE,.....Baltimore, Md.
GEO. R. WRIGHT,.....Milwaukee, Wis.
R. E. CLEMENS,.....Erie, Penn.
E. RUSSELL BERRY,..... Milwaukee, Wis.
A. McC. DUNCAN,.....Savannah, Ga.

PREFACE.

This little volume, whose object is to treat of Rowing, Training, Racing, Exercise, etc., in all their bearings, was ready for publication early last fall, but the parties with whom I had supposed a definite arrangement concluded for its publication, seeing fit to avail themselves of a very small hole through which to escape from their engagement, made it necessary to hold it over until the present time.

The merely keeping back the publication of the Work, until this day, although a disappointment, would not be nearly so great, were it not that the delay has necessitated many changes in the arrangement of the matter, while some portions of the manuscript before intended for publication, have been left out entire, and others rewritten, making a task, which, much as I am devoted to the cause, I would willingly have escaped. While I am aware that many errors, must, from the nature and manner of its preparation, have crept into the Work, whether of theory or composition, or both, I must plead, as an excuse, that of John Locke, in the preface to his "Human Understanding:" "I will not deny but that, possibly, it might be reduced to a narrower compass than it is; and that some parts of it might be contracted, the way it has been writ in, by catches, and many long intervals of interruption, being apt to cause some

repetitions. But to confess the truth, I am now too lazy, or too busy, to make it shorter."

It has been said that a fashion prevails, of late, with authors, in lieu of identifying the preliminary pages with the subject matter of the Work, to embody in them an apology for intruding, somewhat after the style of Mr. Paul Pry, and that the difficulty of disguising this under an "excuse" for publication amounts to more than the toils of authorship.

The exception to this, says the same cynical authority, is to be found in the preface of an author who claims a philanthropic motive for the publication of his book, while still another was forced to succumb to the entreaties of innumerable friends, and print his little collection. In my position, as author of this volume, I think I may be excepted, in both these degrees, from the above charge. In the first, the object is to develop and encourage, among the youth of America, a love for exercise, and more especially that of Rowing; while, at the same time, it is a complete instructor upon everything pertaining thereto. In the second, although my friends were not so uncharitable as to urge me to sacrifice myself upon the altar of literary ambition, in the manner referred to, they yet accorded me such encouragement and assistance as led me to take the risk. Two years ago, a certain Boat Club just organizing, desired to obtain a book which should teach them the proper system of Rowing and Training. They tried all the leading publishing houses, but no such Work was to be had. A little later, the Harvard vs. Oxford Race, was about to take place, and innumerable articles appeared in every newspaper in America, some stating that the Harvards did not pull an American "stroke,"—others that they did. Some said that their "form"

was different from that of the Englishmen, and, just previous to the race, articles appeared in the prominent English journals, stating that "Harvard, at the last moment, adopts the English "stroke." This, of course, with a view to pave the way to a possible defeat of the Oxfords.

It was with these facts before me, and a knowledge that no special system of Rowing and Training appeared to be universally adopted in America, that I undertook the task of writing a treatise on these subjects, and submitting them to the rowing fraternity of America.

Boating has become so prominent among the recreative arts, in America, during the past few years, and international contests, giving rise to long and earnest discussion upon the relative merits of English and American training, have been so frequent that the want of some real American authority has been severely felt, and, in this volume, I modestly lay claim to this authority.

Wherever I have felt a doubt upon any point, I have not hesitated to consult the best authorities, before giving a positive opinion, and where such authorities seriously conflict, I have advised a course that may be pursued with safety.

The contributions, by the gentlemen whose names accompany them, will add much of value to it, as they are prominently known as boating men. In regard to the reliability of this Work, I can only say that, a year ago, I sent out circulars soliciting information and assistance, and that since that time, I have been in correspondence with the leading amateur and professional oarsmen on this side of the Atlantic, most all of whom have assisted me in many ways, and whose views upon these subjects can be traced, in various parts of the volume, by those acquainted with them.

I at first intended, and had prepared, an account of all the prominent Races in the history of American Rowing, but these I have cut down to a small compass, upon the advice of leading oarsmen, as the record would only be complete to the date of publication. I had also a history of all the Clubs in America, which would have been published, had the Work appeared in time; but I now throw them out, reluctantly, as a catalogue is being prepared by a prominent boat-building firm, which will give them in full.

In conclusion, I must beg that the oarsmen of America be not too critical in their examination of the Work, but, taking the will for the deed, accept it as the offering of one who desires to do what he can for the cause of American Rowing.

ROBERT B. JOHNSON.

Milwaukee, March 1st, 1871.

EXERCISE.

ITS RELATION TO HEALTH.

However great may have been the advances of the moderns in science, and in multiplying the resources of art, they are still inferior to the ancients (more particularly the Greeks and Romans) in a knowledge and practice of the union of physical with mental culture.

Until of late years, there seemed to be no medium between, on the one hand, an almost total seclusion of youth to the sacrifice of their health and bodily vigor, and on the other, a constant addiction to rough sports, to the neglect of all intellectual and moral improvement. If the youth, at school or college, indulged in exercise, it was either irregular, forced, and violent, or so unnatural as to deform and retard the growth of the whole body, by the too exclusive use of a single limb.

Looking at the subject in a medical light, it may be considered a doubtful point, whether all the resources which chemistry has now placed at the disposal of a physician, in such a variety, of the most powerful mineral preparations and active principles of vegetables, are not counterbalanced by a neglect and ignorance of the combined power of regimen and methodical, yet varied exercise, on which many of the ancients laid such emphasis, and in the employment of which they were so often successful.

It is generally thought sufficient, with us, to cultivate the mind by written and oral instruction, and leave the body to rust or waste, as individual caprice may prompt. Every reader of history knows that the Greek and Roman youth were treated after a very different method. Strength of body and endurance of fatigue, were not then thought incompatible with easy and graceful movements, finished delivery in speech, and the sublimest speculations in philosophy. The education of the Greeks (the Lacedæmonians excepted) consisted of four principal branches, viz: The gymnastic exercises, letters, including oratory and philosophy, music and painting.

The Gymnasia were schools for all manly exercises, to give robustness to the frame, and to preserve it in the plentitude of health, while at the same time, it became the better prepared to endure the fatigues and privations of war. The five principal exercises practiced in these establishments, and subsequently in the national games, or festivals, were running, wrestling, boxing, throwing the discus, or quoit, and leaping. To these, it is claimed by some, should be added the contest for the javelin. Not only was muscular power increased by these means, but the senses were rendered more acute, and the facilities for acquiring knowledge, through these important, and, indeed, only channels, were greatly increased. The connection between the efforts of the mind, and feats of bodily strength and agility, was formally acknowledged, not only in the practices of some of the most distinguished statesmen and philosophers of antiquity, but also in the fact of prizes being disputed in the Olympic games, for history, poetry and eloquence, as well as for the exercises already mentioned. Herodotus recited the nine books of his

history at these games, and Sophocles is said to have expired through joy, at receiving a poetical prize at them.

Gymnastics has been defined: "The art of regulating the movements of the body, in order to develop its strength, to improve its agility, its pliancy, and its powers; to preserve or re-establish health, it is intended, in fact, to enlarge the moral and physical faculties." Gymnastics may be studied under several points of view, such as in reference to the means and processes employed, its application to the study of the Olympic games, and military exercises, and finally, its uses in hygiene and therapeutics, or to the preservation of health and cure of disease. Herodicus has been regarded as the founder of medical gymnastics, although Galen refers to Esculapius, as one of long anterior date, who gave directions on this head.

Herodicus, by following his own maxims of exercise, from being a valitudinary, became healthy and robust. He has been accused of being somewhat empirical in his directions; and it was left for his pupil, Hipocrates, to give method and consistency to this branch of the healing art. The latter recommends gymnastic exercises in many parts of his treatises on diet and regimen. Celsus, his imitator and admirer, was very particular in pointing out the gymnastics applicable to the diseases of which he speaks.

Galen, in his different works, gives precepts on the application of methodical exercise. But the object of this introduction is not to urge a resort to gymnattics, or any special form of exercise, so that it be "exercise," and not an "airing," which some people are in the habit of taking every week, perhaps, every day, no matter which, in a close barouche or other vehicle, which does not do them as much

good as if they were to recline for an hour in a pitch-pine coffin, as the surroundings in the latter position might possibly soften the heart, while those of the former would not certainly toughen the body.

The vanity of parents, by which they urge their children to excessive exercise of their mental faculties—that is, of the brain, is either productive of inflammation of this organ, ending in death, or throws it into such a state of lassitude as to give rise to mental imbecility, perhaps, downright idiocy, in after life. Grown and aged persons are too apt to forget that confinement in a close room, and continued application of the mind to one subject, for hours, which they allow themselves, though not always with impunity, cannot be practiced by children whose organs, muscular and nervous, that is, of locomotion and sensation, require continued variety and space, and fresh air. Every part in the young is growing and impressible, and every part must receive its due proportion of stimulus and exercise.

Without fresh air, and indulgence in bodily sports, respiration cannot be fully performed. Of course, the blood cannot undergo the changes which fit it for carrying nutrimental matter adapted to the wants of the several parts of the system, such as earthly matter to the bones, fibrin to the muscles, and so on. Digestion, of necessity, becomes impaired. The external senses are all in a state of forced inactivity, except, perhaps, the eye; and this, instead of being exercised in looking at the innumerable objects in nature, is being ground down in attempting to read small print. A lack of sufficient bodily exercise is not only prejudicial to the mind and future usefulness and greatness, but it injures the health and destroys, irredeemably, the natural cheerfulness of early

life, making it, by cruel anticipation, a depository of the anxieties and despondency of old age.

On the advantage of exercise in the open air, people are generally agreed; but false theory, indulgence, excessive thirst after riches and literary renown, present so many obstacles, in the way of giving to this opinion more than the force of an abstract truth, that the majority of mankind suffer from neglect of a habit,—that of walking,—which it is in the power of nearly all to practice.

We run with avidity, after dormant balances, steel and whalebone splints and the like, under the expectation of getting a little support for a weak back, or to correct a propensity to stoop, or to lean a little to one side. But we receive coldly, a demonstration of success, in correcting these infirmities, by the simple and natural process of exercise, and the consequent strengthening of the muscles of these parts, which, together with the ligaments, are the true supporters and bracers of the back bone. Out-door exercise cannot, with us, be so active, persistent, and varied, as in Great Britain, France and Germany, as there are few countries in the world in which so marked a difference prevails between the temperature of winter and that of summer, as in the United States. These, it is true, embrace a diversity of climates, and yet the remark just made, applies to all the States in the Union, except the extreme Southern ones. So vivid a contrast between these seasons, requires of the inhabitants, a mode of living and style of dress, and even intellectual efforts, strongly contrasted. We ought, in the summer, to adopt all the precautions of even a rigid hygiene, but in the winter, to use a more substantial and nutritive aliment, in conjunction with numerous sports and athletic

exercises, as well to give present vigor as to prevent future disease, and a freedom from languor and debility may be expected the following summer. Many of these will be the more beneficial by being voluntarily had recourse to without the entreaties of friends or the formal advice of a physician. If the youths who glory in the excitement of an English game of "hockey," known in America by the homely name of "shinney" could persuade their dyspeptical fathers and nervous mothers to walk out and witness their exhibitions, and occasionally to extend their walks around the water course or rivers, or around the ponds, which are the theatre for the display of agility and address in skating and sliding, these latter worthy personages would be more willing to retire to bed betimes; would sleep sounder, and would awake in the morning with a less feeling of the horrors, than some of them are wont to complain of. But, more's the pity, this is not the case. Practice and experience are words of great power in the social concerns of life, and give their possessors much, and merited influence, over others less practiced and less experienced. But feeling the deficiencies which kept themselves in ignorance of much that is useful and profitable in this life, are men sufficiently alive to the means of protecting those over whom they have charge, from the sinister influences, which, in earlier life, may have pressed on them. The whisperings of vanity are more readily listened to than the suggestions of wisdom, and the health of a child is oftentimes sacrificed to the love of exhibition in a parent. But it is not necessary to dwell any longer upon the criminal system, now so prevalent, of cooping up and restraining children in their desire, which is a natural and common one, to all creatures, to exercise the physical faculties which God has given them.

I will allude, in a few brief lines, to the position of a grown up boy, or young man, at college. We here find the adolescent, hardly more gifted in the use of his senses and limbs, than the child.

He learns the various figures of speech, the beauties of classic authors; but is often ignorant of the division of the kingdoms of nature, or of the class of the vegetables which furnish his daily food. He goes into the country, without even a knowledge of the implements of husbandry, still less of the way to handle them; or, perhaps he goes on board a vessel, hardly knowing what a compass means, and fearful of climbing a few steps up the rigging. In fine, the well educated youth, as he from college is sometimes called, enters the world unfitted to take an active part in its concerns, to appreciate the merits and wants of his fellow citizens, to aid or counsel them in any one practical enterprise or useful labor. And whence this helplessness, this grown childhood? Mainly from a want of natural exercise.

The object of exercise is to secure that vigor of body, which is indispensable to the performance of other duties, and that permanent strength of constitution, without which there is little hope of happiness or usefulness. It is justly regarded as the basis of success in other branches of education, the only means of ensuring to the pupil the power of employing, in future life, the acquisitions which he makes at so great an expense of time and labor. For those who have not felt the sad evidence of this in years of debility, it is sufficient to point to the numbers of literary men who are annually obliged to abandon their pursuits, either partially or entirely, because the body is incapable of sustaining the

mind in its efforts. They need only observe the multitude of others who, with ample intellectual preparations, maintain with difficulty, an artificial and painful existence, and whose physical debility prevents them from exploring the depths of science, and soaring to heights of speculation, which they feel to be within their grasp, but pant in vain to reach.

Disease will generally come suddenly, violently, and frequently enough, even when we do our best to avoid it, but to take no measures to ward it off, and even to court it, as is so often done, and in so many different ways, is criminal in the extreme. The summer season puts us of the northern and middle latitudes, in nearly the same physiological condition in which the inhabitants of southern climates are, most of the year round. If we would avoid disturbance and disease, headache and continued thirst, feverish heat and actual fever, flushed skin, or one covered with eruptions, we must imitate these latter in their usual diet, and substitute vegetable for much of the animal food we consume in the winter, drink simple water, or this fluid slightly acidulated, or deriving flavor from dried fruits. We should rise early and inhale, when not in marshy districts, the morning air; avoid the hot noon and afternoon sun; use the tepid or warm bath in the middle of the day, or in the evening, if the dinner has been very simple and light, and taken at an early hour. They who awake in the morning with a hot skin and active circulation, may, with advantage, have recourse to the cold bath, or to sponging the surface with cold water. But if excess of any kind has been indulged in the night before, whether in eating or drinking, or dancing, till a very late hour, the cold bath ought to be omitted and the tepid or warm bath substituted for it.

Health, to be won, must be like maidens fair, and stately dames, diligently sought. A person ignorant or negligent of all the rules of hygiene may for a time retain comfortable bodily feelings—so will occasionally an eccentric beau, a "bete farouche" of a man, attract female regard, perchance love; but both are surely trying critical experiments; and, it must be admitted that the rules of Cornaro in the first, and of Chesterfield, on Politeness, in the second instance, are much safer and pleasanter of general application. Country air is very grateful, refreshing and invigorating; but it does not shield a person against a country sun at noon, or chilling dews at midnight. Drinking mineral water and sea bathing are often admirable recuperative agencies, but they are not antidotes against the effects of gormandising, drinking freely of strong liquors at dinner, or heavy suppers, late hours and dancing. Rural scenes gladden the mind, and by imparting cheerfulness, improve the health; but their influence will not extend through the walls and closed doors of a fashionable hotel, however romantic and picturesque a country it may be in; nor will rouge, artificial flowers, and the German, even in such places, be substitutes for the fresh breeze fanning the cheek, flowers in all their native bloom, and variegated colors, gathered by the party himself, and a gallop on a docile steed, or a row on a placid stream. Fortunately, however, within the last year, since the opening of railroad communication with Colorado and Nevada, has placed it within the power of all to avail themselves of the healthful air and pure water of these mountainous territories, those who can be benefitted by these agents, can find them here, and at the same time will live on plain, pure fare, which is far from being the case at the water cures, so-called.

The hypochondriac, whether from indolence or the oppressive cares of business or study, or disappointed love, (a possible though not very probable case), will not recover the tone of his spirits by merely going into the country and visiting a watering place, and while there, spending his mornings in a billiard room, and his evenings in flirting, with the little interludes of yawning over a novel, or talking politics after dinner. Change of place, to be beneficial, by restoring the body to healthful vigor, and the mind to its lost equanimity and cheerfulness, must be aided by the rules of hygiene, which are little else than common sense experience, eating and drinking, sleep and exercise, in such measure and times, as the majority of those not perverted by vicious indulgence nor excessive love of lucre and fame, have ever most generally adhered to. Two of the chief means by which Hygiea dispenses her benefits, to those of her votaries who visit mineral springs and watering places generally are bathing, and drinking the waters of the famed fount. The benefits from the first, or bathing, are mainly referable to ablution, and the effects depending on the temperature of the bath, rather than to any mineral impregnation in the water.

Of course, the citizen, doomed to keep the limits, can as well enjoy the bath, as he who climbs the Alleghany, or immerses himself in the waters of the Atlantic ocean. What are called medicinal baths may, indeed, from the influence of faith, produce wonderful results in the same manner as miracles have been wrought in periods of superstition, at fountains which have been hallowed by some patron saint. Their natural efficacy was improved by their supernatural reputation. They were really salutary because they were supposed to be sacred.

It was the imputed holiness of the well, which gave it, in a great measure, its healing quality.

The priests of Paganism knew how to turn natural gifts and phenomena to account in favor of superstition, when they erected temples near or over a mineral or thermal spring, and made the invalids who came to invoke the assistance of their favorite god, undergo a regular course of bathing. An arrangement of this kind is still evident in the ruins of the temple of Jupiter Serapis, near Naples. The warm sulphurous water of an adjoining spring was diverted into basins in which the sick and infirm, and on occasions, we may presume, the priests themselves and the attendants of the temple bathed.

The necessity of cutaneous abstersion to comfort and health seems to have been, and still to be, more generally admitted by the half civilized people of northern Europe and Asia than by those who boast largely of their refinement and knowledge, such as the Anglo-Saxons and Anglo-Americans. Even they who visit the places where bathing is performed, are too indolent, as a general thing, to adopt the practice, and they carry home the dust and perspirable matter accumulated on the skin during the journey. What a commentary this upon their search after health.

One would imagine that from their conduct they entertained a medical theory similar to that of a tribe inhabiting the Great Desert in Africa, and who are thus noticed by a modern traveler: "No people have greater aversion to water than the Tuaricks generally have. Even in performing their necessary purifications, which require that a man should wash in a particular way, before his prayers, they avoid water and make use of sand. Many attempts were made by us to discover their reason for keeping in such a dirty state, but to all

our inquiries the same answer was returned: 'God never intended that man should injure his health, if he could avoid it; water having been given to man to drink, and cook with, it does not agree with the skin of a Tuarick who always falls sick after much washing.'" It were most earnestly to be wished that an approximation to habits of this kind should doom the offender to a residence in the Great Desert, as the proper associate of his fellow-savages.

If a person who is obliged to stay at home during the summer, should regularly take a warm bath, at from 92° to 96°, twice a week, about an hour before dinner, and rub his skin with a coarse towel or sponge dipped in salt and water, every morning on rising, he will, as far as regards bathing, have little cause to envy his more fortunate traveling friend for the advantage which this latter may be presumed to enjoy at some famous mineral spring. Nor need this tarry-at-home person despair of deriving benefit from drinking every morning early, and at noon, a tumbler full of the water from his own spring or adjoining lake or river, with the addition thereto of a saline substance, such as a few grains of common salt, or a tea spoonful of epsom, with a few grains of magnesia. Should the water have previously contained earthy matters, rendering it unpalatable or disagreeable to the stomach; or should it offend and lie heavy on the stomach, in consequence of its coldness, it should be boiled and then drank of a temperature either of the atmosphere, or tepid, or warm, as personal experience has ascertained to be most salutary; still adding, however, the ingredients above mentioned. I should, for myself, have great faith in the pure water itself, without any addition, the more particularly if all spirituous and fermented liquors were to be abstained from at the same time.

Let our staid citizen put himself on this course of bathing and drinking "mineral" water, as above, for six weeks or two months, keep good hours, take a walk in a public square, or in the suburbs of the city, in the morning and in the evening, before the dew begins to fall, and I will venture to assure him that he will be able to advantageously compare notes, as to the state of his health and spirits, with very many of his friends, when they shall have returned from their trip to the Springs or to the Sea Shore.

Health, once obtained in this manner, should be retained, as far as the individual himself has the power to retain it, by constant and judicious exercise, temperate living, and a liberal use of pure air.

No special game, sport, or style of recreation, has been advised in these opening pages, as they were simply intended to contain a few remarks upon exercise in general, in its relation to health and the cure of disease. The recreation, however, of which all the succeeding pages treat, is Rowing—the noblest, manliest, and approaching nearest to the scientific, of any game, or sport, or play, in any nation, clime or country.

As a recreation calculated to strengthen a man's or a woman's body, as well as to improve the spirits and pacify the mind, I would recommend it to all who need exercise—and who does not? as affording great pleasureable enjoyment and blessings of body and of soul.

Rowing as an Exercise.

ROWING AS AN EXERCISE.

There are those people who are always endeavoring to make use of everything or anything, which may, if even in the most insignificant manner, serve to introduce them to public notice.

Some go about lecturing upon all the sensational topics of the day; others, of the senatorial class, endeavor, by introducing some law, teeming with wise provisions and suggestions, (so they think,) to win public favor, as a modern Cincinnatus; while the Divinity class, many of them, use what little ability nature has endowed them with, to the end of combining the sensational, political and social doctrines of the day, with a few moral deductions from Scripture, and giving this from the pulpit, with the title of a discourse, as the Lord's Word, which is to be the support of their hearers in their hour of darkness; their food and drink in poverty; and, in time of sickness, their guiding star to future glory.

As to whether or not, this system ensures popularity to the preacher, it is only necessary to call to mind the leading Divines of the present day, whose "sermons" are either printed in full in pamphlet, or in synopsis in the public prints, as the ebullitions of great minds, which should be given to the "people"—at twenty-five cents a copy.

There is another class of would-be popular men, who endeavor, to the best of their ability, which, fortunately, is not very great, to write down many of the harmless amusements and recreations indulged in at the different seasons of the year. They anticipate an amount of public attention and favor, by exposing "the danger to health" of indulging in these "baneful" sports, fully equal to the popularity which the recreation, or sport itself, enjoys with the people. And it is only by constantly maintaining this howl of "danger to health" that they succeed in attracting any attention whatever, for many, who recklessly violate every day, the most vital laws of health, are greatly alarmed and distressed at the prospect of disease from a source whence it is scarcely possible for it to come.

The recreation selected as the subject matter of this book,—that of Rowing,—has been several times assailed, in different countries, by writers vainly aspiring to prominence, as something to be indulged in, if indulged at all, with the extremest caution, because of the "danger to health" likely to result from a too frequent or incautious use of the oar. Such remarks as these, from men of intelligence, can only excite, in the minds of those who know their falsity, a feeling of contempt for their author. But there are those, poor souls, who will never exert themselves to the pitch of thinking for themselves, but get all their ideas of "nature and of God," from what somebody else has said or written. As a natural consequence, they are obliged to either accept or reject, in toto, everything they read or hear, and in the instance of reading a condemnation of Rowing, and not having any written defense, they feel compelled to raise their voices against it.

It is not with a view of endeavoring to remove the prejudices of this class, formed in this way, that I intend to say a few words upon the advantages of Rowing, as an exercise; but to endeavor to induce those who either take no exercise at all, or if any, other and less beneficial exercise than Rowing, to resort to it. The act of Rowing, when properly performed, keeps the whole body in a state of active and invigorating exercise, the muscles of each limb being used in a manner well calculated to strengthen and develop them, while, with the chest expanded and the head well up, a healthy state of respiration will be maintained, and the muscular power of the stomach and lungs cultivated and increased.

A man in Rowing, takes his place upon the "thwart" with his body erect and legs "at ease," resting against the "stretcher;" at the moment of "reaching," or "taking," his arms shoot out straight and stiff from his body, the hands holding the handle of the oar with a firm grip. The oar is then dipped into the water, and the whole "body force" thrown upon it; the legs being straightened out simultaneously with the backward motion of the body, until the oar becomes paraalell with the body, when the entire muscular power of the arm is concentrated in a sudden but continuous semi-jerk to the finish. The swaying backward and forward of the body, while the legs and arms are in motion, cannot fail of strengthening, in a wonderful degree, the chest, back and stomach; and as for the arms and legs, there is no exercise or occupation in which man was ever engaged, where so much natural "work" is done as in Rowing.

With regard to the effects of Rowing, Dr. Fraser, of the University of Edinburgh, made a number of observations with a view to ascertaining the effects of Rowing on the cir-

culation, experimenting for the purpose, upon the crew of one of the University boats. The "sphymograph" was used automatically to record the pulse movements, and apart from any intrinsic importance, his observations may prove of some interest, in relation to recent discussions on the probably injurious effects of Rowing. The observations were prolonged throughout the greater part of the period of training. The changes produced were of an extremely uniform character, not only on the different occasions, but also with the different members of the crew. He presents, in Humphry's Journal of Physiology, wood cuts of the tracings of the pulse of the "stroke oar." The tracings all show that an extremely large quantity of blood is being circulated, with great rapidity. It is obvious that in the great majority of the functional and organic diseases of the vascular system such a position could not possibly be maintained. The author concludes that the subjects of these diseases are therefore completely incapacitated for violent Rowing exercise, and cannot be in a position to be injured by it. It is possible that the presence of incipient forms of disease in the vascular system, might altogether prevent such exercise from being undertaken; but, he believes that all such diseases may be detected by the use of the "sphymograph" in time to prevent further mischief; the examination being made immediately before the boat is entered, and a few minutes after a moderate "pull" has been indulged in.

Very little mischief, however, I am of opinion, need ever be feared, in this direction, or from the source named, and if violent Rowing seriously disagrees with a man, he will soon find it out, he may rest assured; and, moderate Rowing will not injure any man, woman, or child, who is able to lift

an oar, and that is all I have to say to the quacks who cry out against it, as they would cry out against everything else, calculated to improve the physical condition of mankind. Just in proportion as the health of communities becomes better, their practice and income becomes less, and they would prefer, when sure of good pay, to prescribe nostrums for an individual the whole year round, rather than to advise good and frequent exercise and a christian mode of living.

It would be impossible for any one to learn, from reading, about the benefits of Rowing, as an exercise. It must be tried to be appreciated, and any one who has tried it a few times is prepared to admit that, as a health-giving, body-strengthening moral exercise, it has no equal.

Morality of Rowing.

MORALITY OF ROWING.

It will not be necessary to say a great deal upon this subject to those who are acquainted with the manner in which the amateur boat clubs of America are managed, and for those who are not, and are of opinion that the practices of Rowing and dissipation are concommittants, I should advise the perusal of the "Constitution and By-Laws" of any respectable association in the country. Almost every regularly organized Boat Club, or Crew, has the most stringent rules, prohibiting the introduction of liquor in any shape, or under any circumstances, into the boats or boat-house of the Club. The Captains of all crews maintain the strictest surveillance over their men, and any breach of regulations, in regard to the use of liquor or tobacco, costs the offender a severe trial. A course of dissipation, or even the most moderate use of alcohol and narcotic stimulants, is just as incompatable with training for Rowing as shaking dice would be with the professions of a candidate for holy orders.

No oarsman in the country would be so foolish as to engage in an aquatic contest at the same time that he was smoking his half dozen cigars, and drinking his regular "four-fingers" of gin and milk every day, and if he is, or if a crew are, and have to "pull" against men who have "trained and abstained," they will learn, to their cost, that

in order to be a successful oarsman, a man must exercise often and keep clean.

It is true, as has been stated in another portion of this book, that many oarsmen do indulge in dissipation during the intervals between races, but this is no more to be charged to training than it would be to a temperance pledge, had they been bound by one for the same length of time. The question is not what men do when out of training, but when in training; and, in reply to the inquiry: "Are the surroundings of a man in training calculated to injure him morally!" I answer, most emphatically, no,—but, on the contrary, according to the experiences of all trainers, and all men who have been trained, they are calculated to elevate and improve his moral condition in the highest degree.

This fact of constantly exercising, of daily bathing and purifying the body, of eating nothing but good healthy food, of keeping regular hours for going to bed and rising, is sure to benefit the mind and purify the soul, making happier and better christians of all who follow it.

Rowing.

ANCIENT AND MODERN.

ROWING.

ANCIENT AND MODERN.

If not an impossible, it would be at least a difficult, as well as profitless task, to attempt to come at the precise antiquity of Rowing.

Certain it is, however, that the oar was used as an instrument with which to propel ships, long before the Christian Era, and, although as a matter of course, great improvements have been made since that time, in ship-building and naval architecture, generally, as near as we can ascertain from history, the oars used by Xerxes, over two thousand years ago, were essentially of the same style as the flat-baded "sweep" used at the present day. They were used in various ways by the ancients, amongst whom the Athenians were perhaps the most proficient and skillful in the use of the oar, if we may judge from the success which attended many of their naval battles. Sometimes they were used as paddles, and at others as sweeps, projecting from port-holes in the sides of the boat; the rower being concealed from view, for his better protection, as good oarsmen were scarce, and only a certain number were educated in the use of the oar.

In the battle of Salamis, between the Greeks and Persians, about the year four hundred and eighty, before Christ, we are told that the Greeks employed a fleet of three hundred and eighty ships, requiring, it would seem, a considerable number of rowers. The Persians had a much larger fleet, but were miserably defeated in the battle, owing, it is said, to their being very much inferior to the Greeks, in naval skill. Now, naval skill, at that time, as at the present, consisted in the rapid and effective evolutions of a ship, in movements offensive and defensive; and, as the Greeks showed themselves so much the superiors of the Persians, as well as of most other nations at that time, in that branch of art, it is only fair to concede to them the honor of being the champion oarsmen of their day.

The Romans, at this period, and for several centuries after, were very backward in their acquaintance with nautical affairs generally, but having at about the year two hundred and sixty, (B. C.,) determined to conquer Sicily, they set about acquainting themselves, somewhat, with the art of building and managing a ship. But they could not hope to contend successfully against the Carthaginians, who were, or would be their rivals, if the Romans succeeded in building a fleet, but who were now possessed of a powerful naval force, under the command of skillful mariners.

The Romans, however, were never daunted by difficulties, and determined to make the best description of craft possible, under the circumstances. Fortune, at this time, as at many previous and subsequent ones, smiled upon them: a Carthaginian ship-of-war happened to be cast away on the coast of Italy, and with this for a model, in the space of sixty days from the time the timber was cut, they had a fleet of one

hundred and thirty sail afloat. Meanwhile the ships were building, those who had been selected as rowers were obliged to "practice their art seated on benches, erected for the purpose on the land."

This was certainly an original and novel method of teaching men the art of Rowing, and whether it was an effective means or not, history does not state; but the Romans, although courageous and self-reliant, were yet not rash enough to venture a battle with the Carthaginians, upon what, under other circumstances, would have been equal terms, but which now, in consideration of the much more extensive experience of the latter upon the water, rendered them greatly superior to the former, resorted to an ingenious, and, as the sequel proved, a successful device to conquer their enemies. They constructed what they termed a "crow," which was, in fact, nothing more nor less than a modern pile-driver, with a long arm, and placed this, or one of these, for they had a number of them, in the bow of each of their ships, and when the enemy came to close quarters, this was sprung over the boat, usually sinking the craft and leaving its occupants at the mercy of the victors.

The Carthaginians observed these instruments in the boats of their antagonists, but only laughed at them, not thinking that they were so easily outwitted on their own element. The Romans gained a decided victory, and were afterwards, as history shows, quite a powerful nation upon the water. Cæsar, himself, we have good reason to believe, would have been lost upon the Adriatic, while pursuing Pompey into Greece, had it not been for the skill of his attendants, who rowed the boat safely to shore. We are told that when Antony was at Tarsus, in Cilicia, he summoned

Cleopatra to his presence. Having murdered her brother, she was now sole ruler of Egypt, and reveled in the most extravagant luxury. At the mouth of the river Cydmus, she entered her barge, the deck of which was adorned with gold, and its sails were purple. The oars, of which there were about twenty, were set with silver, and the rowers kept time to the sound of flutes and lyres. The Queen, dressed like a goddess, reclined beneath an awning embroidered with gold, while boys, adorned like cupids, sat fanning her. Her female attendants were around her, in the habits of graces and the nereides, or sea-nymphs, and costly spices and perfumes were burned before her. The figure-head of her barge represented a draggon's head, and was most elaborately carved. The masts, of which there were two, were surmounted by golden crowns, and the entire craft was constructed and adorned in a style surpassing description.

When the news of her approach reached Tarsus, it is said that all the people crowded to see her, and history says that Antony was left sitting alone on his tribunal in the market place. He sent to invite the Queen to supper, but she insisted that he should come and sup with her, which he did, trying afterwards, in vain, to equal the magnificence of her entertainment. Perhaps no person before, or since, has ever gone Rowing in such state as this Queen ; and, certainly very few of our oarsmen, upon "barge days," propel their craft to the music of "flutes and lyres." So that, although we have some very handsome barges amongst our clubs now-a-days, we can scarcely hope to equal that of "the pompous dame of Egypt."

The oars made use of, on that occasion, were of very moderate length, and tapered from the end of the blade,

which was encircled by a silver band, to the handle, which was almost oval and handsomely tasseled. It is fair to presume that speed was not so much the object as display, in the "get up" of the barge.

The Scandinavians, and Northmen generally, appear to have been rather behindhand, for many centuries, in all that related to the art of boat-building; for, we find them as late as (A. D.) nine hundred and sixty, making conquests of surrounding islands, in ships of the most unwieldly model, propelled by oars, looking, for all the world, like modern soup ladles, only that the handle merged gradually into the ladle portion, instead of being distinct from it. They were, however, skillful and fearless navigators, and understood thoroughly the use of their craft, and made many valuable conquests and discoveries.

Gradually the intercourse of the nations became more extensive, carrying, as a consequence, civilization throughout Europe and the North. Each nation, emulous of its neighbor, put forth every effort to increase its possessions, and thereby its wealth; and, as a consequence of this condition of things, the art of ship-building was fostered and developed. By the year 1500, such progress had been made in ship-building and navigation as warranted the undertaking of the longest journeys by sea, and at this period, as we know, it attracted more attention, in consequence of the discovery of the New World, than at any previous one in the world's history.

Almost as late as the Sixteenth Century, some of the ships of Portugal, which was then a great maritime nation, were propelled mainly by large sweeps, canvass, as a matter of course, being used in conjunction therewith. The oars, or

more properly, sweeps, used at this time, were of good model, but, of necessity, very large and heavy, to suit the service for which they were made. Many of the severest and most important battles were fought upon the water, and victory, in almost all cases, was achieved mainly through superior seamanship, so that the safety and independence of the principal nations depended upon the "availability" of its ships and sailors.

We have no means of knowing at what precise date the crew were mustered who first "manned the capstan" or "spliced the main-brace;" but, whoever they were, to them we give credit for having been the first to introduce a system of practical and successful boat rowing in crews. By this I mean that Rowing in Crews, as practiced now among boating clubs, had its origin in the navy, where, from almost the earliest history of all regularly organized navies, down to the present time, regular crews of men have been detailed to "pull" the various small boats carried by men-of-war. An officer has at all times accompanied crews in their expeditions in small boats, taking command, and usually acting in the capacity of Coxswain. It required, of course, that intelligible orders should be given to the men, in order to insure promptness and expedition in the execution of all commands; therefore it is, that the various orders now used in the different navies were gradually adopted and retained.

They were all common-sense, and simple enough, and, for the most part, very appropriate. In many, and in fact, all the battles fought upon the sea, much of success depended upon the skill and efficiency of boats' crews in boarding and grappling. They were often obliged to "pull" their boat through a rough sea, exposed to a galling fire, which they

could not return, and after having reached the enemy's ship to board and endeavor to capture it.

It is little wonder then, that the Art of Rowing, born and fostered in the navy, should make rapid progress, and that after Northern barbarism had been superseded by European civilization, and the recreative arts had been transplanted from their birth place in the classic hills and valleys of ancient Rome and Greece to the Continent of Europe, Rowing should be taken hold of and encouraged as an art, which, although so little known in the days of the Cæsars, was destined to rank first in the arts of the physical world. As Europe became populous and wealthy, recreation became the privilege of a large class of people, and the Continent being so liberally supplied with fine rivers and bays, naturally, boating was resorted to as the recreation affording most profit to health, and, as a consequence, an interest was taken in it among the upper classes, making it a popular and refined exercise, which it has been ever since, and is likely always to remain.

England, particularly, although not on the Continent, has, from the earliest times, always nourished and encouraged among its people a fondness for athletic sports, and that she has been well repaid is seen in the vigorous character of her people, who have not, however, "cultivated their muscle at the expense of their brain," as the wonderful genius of her statesmen amply testifies. Rowing has, in England, taken the precedence of all other sports ; victory, with the oar, has brought to many a man there, as much glory and honor as triumphing over his fellows, in class competition, has to many another. The English people appear to take naturally to active out-door exercise ; whether this arises from the nature of the climate, or

from some other cause, it is difficult to determine; but, certain it is, they enter into their national sports heart and soul. The real cause, however, is probably to be traced to the age of Chivalry, when feats of agility and boldness often won for a man knighthood and the favor of royalty.

America, from the mixed nature of its population, and from other causes, has had no such national characteristics engrafted into the lives of its people. It has, however, cultivated to a certain degree of perfection, all the recreative arts, and the imputation of being a "puny American" is fast becoming "played out."

The Art of Rowing prospered in England; the people took hold of it as a genuine means for the cultivation of both the physical and mental powers of man; they encouraged it to such an extent, that it was adopted as "the" sport in the Colleges and Academies, wherever water could be found in sufficient quantity to practice it. The annual contest between the two leading Colleges has become more popular with each repetition, and it is now safe to say that it equals, in intensity of excitement, the "Derby Day." In the United States, also, although not for so long a time, we have had annual contests upon the water between rival Clubs connected, for the most part, with Colleges in the Eastern States.

Much as has been said about the little attention that has been paid to exercise or sport in the United States, in past years, when it is taken into consideration that until within a comparatively few years, most of our cities were very new, and that the wealthy class was very small and scattered, it is astonishing to note the attention that was paid to Rowing, and the number of flourishing Boat Clubs that were formed

in far off western towns, (at that time,) when "time was money," indeed," and little of it could be spared for any but necessary recreation. Amongst the many thousands who were constantly migrating from Eastern States to the Great West, were some who were devotedly attached to the Art of Rowing; and the influence and example of these, added to the natural fitness of the magnificent Lakes and Rivers with which the country is blessed, to the prosecution of acquatic sports, gradually cultivated a taste for them among the people, which has ever been on the increase, and well organized Clubs, occupying well built houses and owning handsome "shells" and boats, of all classes, can now be found in almost every city and town. The West may, perhaps, make less ado about her sports than some other sections of the country, but she is none the less active or proficient in them.

Rowing occupies a place in American sports, to which none other can ever attain, and is of itself a refining and refined exercise, worthy of, and happily also receiving a large share of attention from the whole American people. I would wish to claim for Rowing everything that can be claimed for it, by even its most enthusiastic admirers, but I will not, as many have, go so far as to classify Rowing as a science. All human knowledge is said to consist of sciences and arts, and it is sometimes, if, indeed, not always, difficult to draw the line of distinction between them. All the principles of science have some reference to practice, and the theory of every art may, perhaps, be called a science, but there is a difference between them which, important or not, as it may be, is about as follows: A science is a system of general truths, relative to some branch of useful knowledge, and supported

by evidence, either demonstrative or highly probable. An art is the application of the organs of the body, or the faculties of the mind, to the execution of some design, directed by the best principles and rules of practice. A science is addressed entirely to the understanding; an art generally occupies both the understanding and the members of the body. A science is acquired by study alone; an art cannot be acquired without much practice of the operations it contains. Accurate knowledge is all that is necessary in science. Eminence in art demands besides an acquaintance with rules and the habit of dextrous and ready performance. So that we cannot designate Rowing as a science, and not being a science, it MUST be an art.

But the glance which we have taken at the origin and progress of Rowing, circumscribed and imperfect as it may be, is amply sufficient for our purpose, as, in fact, it is not really essential to the work, but may be accepted as the literature of Rowing.

ROWING—MODERN.

The record of Boat Races in America seems not to have been very well kept, until within the past ten years, and the accounts of races, anterior to 1860, are rather imperfect. The literature of Rowing, although scant now, was indeed meagre then, and very few early races of interest are re-

corded, with the exception of those which took place in New York City. It is very reasonable to suppose that races used to occur fifty years and more ago, when what are now great seaboard cities, were only villages, but the inhabitants either failed to record them, or their descendants neglected to preserve the record. In 1859, the New York Dispatch republished a partial account of a race that came off in New York Harbor, in December, of 1824, between a crew of the British frigate "Hussar," then lying in the harbor, and a crew of Whitehall boatmen, for a purse of one thousand dollars. Captain Harris, of the frigate, issued the challenge, which was accepted by the Whitehallers, and the 9th of December was appointed as the day of the race. The crew of the British boat had won a number of races in different parts of the world, and were considered almost invincible. The boat used by the Whitehallers was the "American Star," which had previously been in several races, in all of which she gained considerable honor. In the race, the Star took the lead at first, but the "Dart," which was the name of the English boat, soon came even. The Whitehallers now made a "spurt," and got the lead again, which they kept increasing, from time to time, until the finish, coming "home" about four hundred yards in advance of the English crew.

The race was conducted with the utmost good feeling on both sides, and the crew of the British launch, which served as the "home stake" boat for the frigate crew, greeted the victors with three hearty cheers, and "struck" their flags. The distance was four miles, and is said to have been made in twenty-two minutes, in a heavy swell. An immense crowd congregated to witness the race, which created the

greatest "furore" of any aquatic contest up to that date.

Several prominent races, however, occurred at a date considerably earlier than this, among which that between two rival crews, one of Long Islanders, and the other of New Yorkers, deserves especial mention. This race came off in July, 1811, and was won by the New York crew, with ease; they, however, having considerable advantage in their boat, which was more "seaworthy" than that of their competitors. The boat of the New York crew was placed in the old Museum, from which it was transferred to Barnum's, where it remained until that institution was consumed by fire, in 1865. Quite a number of races, none of them very important, took place occasionally, from this date until 1838, when a Whitehall crew challenged a crew in Newark, N. J., to row a five mile race for one thousand dollars. The Whitehallers gained an easy victory, and had the lead from the start to the finish.

Then followed a challenge from a Poughkeepsie crew to any crew in New York, to "pull" the same distance for a purse of the same amount. The gauntlet was soon taken up by a crew composed of two Seaman brothers, and four other "pullers," all of whom were well known and successful oarsmen at that time. The New York crew won the race and purse without anything but an ordinary effort. The boat used by this crew was not permitted to remain long out of the arena. She was soon after matched against the "Spark," in a five mile contest, for one thousand dollars, in which the the latter came off victorious. The Roberts brothers, soon after this, had a race in their boat, the "Brooklyn," with another four-oared crew, in the "Fairy," which latter won

the race. In August, 1839, occurred a race which created quite an excitement, between the "Shamburgh," of Whitehall, and the "Shakespeare." It was a five mile straight race, and was pulled in good time. The course was from the Reef to Castle Garden, where a "stake boat" was anchored. It was impossible, at any time, to say which crew would win, as they changed places as often as six times during the race. It was a very close contest, from first to last, but finally terminated in favor of the "Shakespeare." For several years previous to this time, a considerable interest was taken in aquatics in New York and vicinity, and quite a number of Clubs were formed, which flourished for longer or shorter periods of time. Some of the principal Clubs of this date were the Castle Garden Boat Club Association, the Ærial Club, Pearl Club, Gazelle Club, Gull Club, Wave Club, and several others, of which the Wave was about the strongest. This was an epoch in the history of American Boat Clubs, which was certainly very remarkable for one thing, viz: The harmony with which all aquatic contests passed off, and the entire absence of anything like bickering at regattas or meetings. From 1834 to 1838, regattas were very common at Poughkeepsie and Newburgh, New York, at which immense numbers of people usually gathered, many of whom came from far sections of New York and the adjoining States. At one of these races the Gull Club, of New York, entered their boat, and carried off the second prize—a suit of colors—and after the race, the same crew pulled the boat from Newburgh back to the boat house in New York, a distance of sixty-five miles, and arrived there before 11 o'clock that night. Another race, of considerable importance, took place in the summer of 1839,

between two four-oared crews, manning, respectively, the "Duane" and the "Willis." It was a five mile race, with one turn, for a purse of one thousand dollars, and was won by the "Duane," without an effort.

Two years earlier than this, there was an important single "scull" race, between Stephen Roberts, at that time Champion, and Sidney Dorlon, who accepted a challenge issued by Roberts, to row any man for a purse of two hundred dollars. Subsequently to the arrangement of this match, they had three races, in the first of which Dorlon was victorious, and in the second Roberts. The third and decisive race was for a purse of four hundred dollars, and proved merely a walk over for Roberts, as Dorlon was taken with cramps before the race was well commenced, and ceased rowing.

In October, 1839, a very exciting and interesting race came off, which was participated in by five four-oared boats and nine six-oared boats. The first race was won by the "Water Witch." The six-oared race, which was a very close and exciting one, was won by the "Gazelle," which came in about one hundred yards ahead of all its competitors.

In 1842, a regatta took place off Castle Garden, under the auspices of the association of this name. This was one of its annual contests, and was the last regular Association Regatta. The first race was for a beautiful goblet, and was contested for by three parties; Mr. Baker winning the race with apparent ease. The second race was for a silver salver and goblet, and was contested for by four-oared gigs. Two boats, the "Atlantic" and "Experiment," were entered, and pulled a very exciting race, the

"Atlantic" winning by a few yards. The third prize was a beautiful chased pitcher, to be tried for by six-oared boats. The "Gazelle," the "Galatea," and the "Eagle," were entered. The "Gazelle" and "Eagle" fouled at starting, by which the "Galatea" obtained a good lead, and won the race.

In the summer of 1839, one of the most exciting and interesting of all the Newburgh Regattas came off. The Newburgh Club entered several boats; the Poughkeepsie Club one boat; Cold Spring Club one boat; Castle Garden Association, New York, three boats; Independent Boat Club Association, New York, three boats. The prizes were: Double sculls, silver cup; Four-oared boats, silver cup; Six-oared boats, First prize, silver vase cup; Second prize, silver cup. The record of this race appears not to have been kept, and the above data were obtained from the announcement made previous to the race.

The next regatta of this Association came off in 1841, and was for barges. The first race was for six-oared barges, and was participated in by eight crews, from different sections of New York State and New Jersey. It was a four mile course, and was won by the "Dutchess," in 16.11. The next race was for four-oared barges, and had ten entries. The "Thomas Jefferson," of New York, won this race.

At Newburgh, in the summer of 1837, a contest took place between eight six-oared boats, six from New York and two from Newburgh. The ladies of the latter place made three handsome setts of colors, which they offered as prizes to the three first crews. The first and second prizes were won respectively, by the "Wave" and "Gull," of New York,

and the third was awarded to the "Corsair," of Newburgh.

The Regatta of 1842, was inaugurated and carried out on a fine scale, and was certainly a credit to its projectors, the Newburgh Amateur Association. The first prize, in the six-oar race, was one hundred and twenty-five dollars, and was won by the "New Jersey;" second prize, eighty dollars, won by the "Galatea;" third prize, thirty dollars, won by the "Eagle."

The second race was the Citizen's Regatta, for four-oared boats. The first prize, one hundred dollars, was won by the "Washington;" second prize, sixty dollars, was won by the "Duane;" third prize, twenty-five dollars, won by the "Robinson." The citizens of New Windsor offered two prizes, one of thirty-five dollars, and the other of fifteen dollars, for the winners of a sculling match. The "Crolious" of Newburgh, won the first prize, and the "Hookemsnivey," of the same place, the second. At this time there seemed to exist a friendly rivalry in aquatics, between the towns of Newburgh and Poughkeepsie, but after years witnessed a wonderful decline. Many a good crew hailed from Poughkeepsie, and many a hard-pulled race was won by her oarsmen. The first of these races occurred in the summer of 1837, which was participated in by six six-oared boats, from New York, Brooklyn, Fishkill and Poughkeepsie. The first prize was a purse of two hundred dollars, and was won by the "Washington," of Poughkeepsie, with almost ease. Two years later, on the Harlem, a regatta took place between this boat, which was a famous one, and three boats from New York. The course was four miles and a half, and was made by the "Washington," in 27.15; very good time,

indeed, considering the style of boat used. Taking it altogether, it was a hard-pulled race, and a well earned victory.

It was not very long after this that another Regatta came off at Poughkeepsie. This was a five mile race, for four and six-oared boats. The "D. D. Tompkins," of New York, won this race, beating the "Washington" by nearly a fourth of a mile, and winning the first prize, a beautiful boat, valued at three hundred dollars.

The second race, for four-oared boats, was won by the "Duane," of New York, to whose crew was awarded the second prize, a boat valued at two hundred and twenty-five dollars.

From this date, races began to be very frequent at most all points East, and boat clubs multiplied very rapidly. The first boating association in the United States was the "Castle Garden Amateur Boat Club Association," organized in New York City, in 1834, some of whose races are hereinbefore recorded. This association comprised a number of clubs, whose houses were at Castle Garden, and whose members, for the most part, were the first gentlemen in the city. The oldest boat club now organized is the Atalnata Club, of New York, which was organized in 1848. The two next oldest are the Bachelors Barge Club and University Barge Club, of Philadelphia, the first organized in 1853, and the second in 1854. After these, the oldest club in American waters, is the Milwaukee Boat Club, of Milwaukee, Wisconsin, which was organized in 1855, and is one of the most flourishing clubs in the country.

In October, 1850, several interesting races took place, one of which was a match race for a purse of two hundred

dollars, between the "Washington" and "Thomas Jefferson," two old rivals. The "Jefferson" came in about one hundred yards ahead.

In the fall of this year, a single scull contest, between four prominent scullers, came off opposite Castle Garden. The contestants were Lee, Burns, Decker and Thomas. Lee was a prominent sculler of this date, and came off victorious in this race. The same year he had a race with Conkling, in working boats, for two hundred dollars. Lee also won this race by some two hundred yards.

Another race of this year, was that between the "Commodore" and "Bevins," single scull boats, which was won by the "Commodore."

In 1852, the first of the College Races, between Harvard and Yale, took place on Lake Winnepiseogee, New Hampshire. Harvard entered the "Oneida," carrying eight oars. Yale entered two boats, the "Shawmut" and "Undine," each carrying eight oars. The race was over a two mile course, the "Oneida" coming in first, and taking the first prize. The "Shawmut" won the second prize.

Two years later, the city authorities of Boston inaugurated a regatta, and offered prizes for single scull, six-oared and eight-oared boats. The eight-oared race was won by the "T. F. Meagher," of Boston, over a six-mile course, in 42.05, taking the first prize, a goblet, valued at one hundred dollars. The "Stranger," of Boston, six oars, won the second prize, in 46.45, a silver cup worth seventy-five dollars. The single scull race was won by the "Allan," over a two mile course, in 30.55, silver cup, for fifty dollars.

The following year, 1855, witnessed a repetition of this

regatta, under the same auspices. The first race was for single sculls, distance three miles, and was won by the "Battery Pet," in 32.03, taking the first prize, a silver cup; "American Boy," second prize, both New York boats. The second race was for Dories, and the first prize was won by J. Covell, of New York, in 35.37 1-2; second prize, Decker, New York, in 36.05. In the four-oared race, only two boats were entered, both of which were from New York, the Delmonico and Putnam. The course was six miles, and was won by the Putnam, in 51.09; the Delmonico coming in in 51.58. The Neptune, of St. John, New Brunswick, was entered, but did not start. These contests were both for Professionals. Next followed the race for Amateurs, over a six mile course. The Maid of Erin, eight oars, won this race in 46.34 1-2, taking the first prize. The Ariel, six-oars, won the second prize, in 47.57.

On the day following this regatta, the Putnam, of New York, the victor in the contest, was matched against the Neptune, St. John, New Brunswick, for a purse of six hundred dollars, over the same course. The Neptune went over the course, six miles, and won the race in 47.35, the Putnam making it in 51.50.

On the same day as the Boston Regatta, the Newburgh Regatta came off, for double scull and four-oared boats. The four-oared race was won by the Torbos, of New York, prize one hundred dollars. Second prize, seventy-five dollars, was taken by the Suatzel. The double scull race was won by Ferguson and Deneke, of Peekskill. Single scull race was won by a Newburgh man. On the 11th of the following month, Burns and Daw, of New York, pulled an eight mile race, in twenty foot boats, for a hundred dollars

a side, which was won by the latter, by about two lengths, in 54 minutes.

In September, a match came off at Boston, on the Charles River Course, between two crews, one from New York and the other from St. John, New Brunswick. The New York crew pulled in the James McKay, a shell, built by the gentleman after whom it was named, and the St. John's crew pulled in a lap-streak, thirty-five feet long, and carried no Coxswain. The race was over a six mile course, and was won by the St. John's crew, in 42.14; the New York crew coming home in 42.46. This closed the Racing Season of 1856.

In May, 1857, over the Charles River Course, Boston, the Volant, belonging to the Volant Club, of that city, pulling six oars, beat the Huron, of Harvard College, also a six-oared boat, over a three-mile course, making the distance in 21.00, against 21.38, by the Huron.

In the middle of June, the Beacon Cup Regatta came off, over this course, between the crews of Harvard College and those of the Union and Urania Clubs, of Boston. The course was three miles, and was made by the Union, of that Club, in 21.21, winning the first prize.

The Annual Regatta, at Newburgh, came off, as usual, on July 4th, and was for four-oared and single and double sculls. There were two four-oared boats entered, from New York, two from Newburgh, and one from Haverstraw. The first prize was one hundred dollars, and was won by the Experiment, of New York; the second prize was won by the Wood, of Newburgh. The Brophy, of New York, took the first prize for double sculls. The single scull race was won by Daw.

On the 16th of September, the Staten Island Regatta came off. The first race was for double scull working boats, and was won by the Henry Carr, rowed by Lee and Fay. Second race, double scull working boats, won by the Brophy. Third race, nineteen feet single scull boats, won by Burns.

In October, of this year, an exciting race took place between Daw, of New York, and Glenn, of Philadelphia, for a purse of one thousand dollars, over a five mile course, on the Delaware River, at Philadelphia. It was a close and hard contested race, and was won by Daw, in 43.06.

On the day following this race, there was another professional match between the two crews of the Experiment and Allaire, on the Harlem River, for a purse of four hundred dollars, over a five mile course. This race was very exciting, and was decided a draw, on account of the Allarie coming home on the wrong side of the stake. She made the distance in 35.15, and came in a half length ahead of her competitor.

No race of importance occurred until June of the next year, when the second Beacon Regatta came off, over their course on the Charles River. The prizes were for wherries and six oars. The course for the former was two miles, and the prize was won by R. F. Clark, who made the distance in 14.54. The next race, for six oars, was contested by six crews, and was won by the Harvard, in 19.22. On the Anniversary of National Independence, this year, the Young Men's Democratic Club held a Regatta on Charles River, to be for wherries, four-oared boats, sixes and eights; an allowance of thirty seconds to be made for all extra oars. The course for wherries was two miles, and was won by T. Doyle, in 19.29, taking a prize of twenty-five dol-

lars. P. H. Colbert took the second prize, fifteen dollars. The course for four-oared boats was three miles, and was won by the Red Michael, in 22.09, to which was awarded the first prize, fifty dollars. The Pride of Boston took the second prize, twenty-five dollars, in 23.00. The course for six-oared boats was six miles, and was won by the Harvard Crew in 40.25, taking the first prize of one hundred dollars. The second prize, fifty dollars, was won by the Fort Hill Boy in 41.44. The Newburgh Regatta also came off on this day, and was for four-oared boats, double-sculls, single sculls and fishing skiffs. The four-oared race was between the Experiment, Bryant and Wood. The first prize was won by the Wood, one hundred dollars, and the second by the Bryant, twenty-five dollars. The skiff race was won by the Sarvis brothers, of Newburgh. The double-scull race was won by the Gazlay, of Newburgh. Single sculls, by Hancon.

In August, the Staten Island Regatta, for single and double sculls and four-oared boats took place. The first prize for double sculls was won by the Gazlay, of Newburgh. The first prize, for single sculls, was won by Fay. The third race, for four-oared boats, was won by the Bryant, to which was awarded one hundred and fifty dollars. To the George J. Brown the second prize was awarded, twenty-five dollars.

On the 27th of the month, the Regatta at Springfield came off. Prizes were offered for four-oared boats, six-oared boats and wherries. The course for four-oared boats was three miles, and was won by the Wood, of Newburgh in 22.00; prize one hundred dollars. The Dan Bryant, of New York, took the second prize, in 23.30, fifty dollars.

In the six-oared race the Fort Hill Boy took the prize, one hundred dollars, in 21 minutes, over the same course. The Borietta, of New London, took the second prize, fifty dollars, in 21.45. The wherry race came next, over a two mile course, and J. H. Seymour, of New York, took the first prize, fifty dollars, in 16.10. The second prize, twenty-five dollars, was won by Burns, New York, in 16.45, Experiment, four-oars, of New York, took the first prize, one hundred and fifty dollars, making the three miles in 21.30. In the autumn of this year, October, 1858, Josh Ward, who afterwards became champion of the United States, pulled his first single-scull match, at Newburgh, where he was born, and has ever since lived. His competitor was John Hancon, and the race was over a two mile course. It was closely contested, and Ward won by two lengths, in 16.07.

On the same date with the above race, a contest took place in Chicago, Illinois, between the Shakespeare Rowing Club, of Toronto, and the Metropolitan Rowing Club, of Chicago, at Chicago, over a five mile course, for a purse of one thousand dollars. Both boats were four-oared, and the Toronto boat walked away from the Chicago boat, from the start, leaving the latter an uncalculable distance behind. The time made by the Toronto boat was forty-two minutes.

In 1859, a great number of very interesting Regattas were held in different sections of the country, one of the first of which was the third Beacon Regatta, on the Charles River, Boston. This was for single and double sculls, sixes and fours, the former to allow eleven seconds per oar to the latter. The L'Esperance, rowed by R. F. Clark, won the first prize, fifty dollars, over a two mile course, in 13.52. The double scull race was won by the Novice, pulled by Brackett

and Carpenter, two miles in 14.31, prize fifty dollars. The six-oared race was won by the Harvards, over a three mile course, in 19.11 1-2 ; prize one hundred dollars.

On the 4th of July following, the Boston City Regatta occurred. The L'Esperance won the single scull shell race here also, making two miles in 14.53, and taking a prize of fifty dollars. Doyle took the second prize in 15.04, winning a prize of twenty dollars. The Olivia, single scull lapstreak, won the first prize in her class, in 15.29 ; prize fifty dollars. The Zouave, of the same class, won the second prize, twenty-dollars, in 16.11 1-2. The E. K. G. won the first prize for double sculls, two miles, in 14.49 ; prize fifty dollars. The Novice won the second prize, twenty dollars, in 14.59. The four-oared race was won by the Monaghan Crew, over a three mile course, in 20.53 1-2, taking a first prize, seventy-five dollars. The Quickstep, four oars, won a second prize, forty dollars, in 21.01. The Fort Hill Boy, six-oars, also won a first prize of seventy-five dollars, making the course in 20.56 1-2. The Mill Boy, six oars, won a second prize of forty dollars, in 22.04 1-2.

The Newburgh Regatta also came off on the same day, over a five mile course. Two four-oars entered from Newburgh, and two from New York. The Wood, of Newburgh, won the first prize, of one hundred and twenty-five dollars, making the distance in 39.00. On the 26th of the same month, the Union Regatta came off at Worcester, and was witnessed by a great throng of people. The shell race was for the championship, and was contested for by the students of Harvard and Yale, in six oared boats. The course was three miles, and was made by Harvard in 19.18, Yale coming home in 20.18. The next race was for lapstreaks, and was contested

by Harvard, Yale and Brown Universities. Harvard also won this race, in 21.13. Brown came in second, in 24.40. The following day witnessed the Worcester City Regatta, comprising three races. T. Grover won the single scull race, two miles, in 16.20, for a prize of fifty dollars. T. Doyle won the second prize, twenty-five dollars, in 16.28. In the shelll race for four-oared boats, the Leader, of New York, made the three miles in 21.01, taking the prize of $75. The Experiment, of New York, took the second prize of fifty dollars, in 21.09. The six-oared shell race was won by the Yale crew, in 19.14, winning the first prize of one hundred dollars. Harvard took the second prize, of seventy-five dollars, making the course in 19.16. On August 15th, occured the third Regatta of the Richmond County Regatta Club, Staten Island. The first prize, for single sculls, was won by Hancon, seventy-five dollars. Second prize, twenty-five dollars, by Fay. The double scull race was won by Neville and Conklin, prize fifty dollars. Biglin and Leary came in second, and took the second prize of twenty dollars. In the four-oared race were entered the Leader, the Geo. J. Brown, Bryant, and three other boats, most all of which were well known in the East. The Bryant won the first prize of fifty dollars, the Brown winning the second prize of twenty dollars. On September 20th, a single scull contest, of considerable proportions, took place at Newburgh, in which Ward, Brown, Hancon, and Grover, pulled a five mile race for one hundred dollars. Ward, who was fast becoming the champion, won this race in good style, Hancon coming in second. During the same month, the Bryant was matched against the Geo. J. Brown, in a race for one thousand dollars. The Bryant came home in 34.40; the Brown being six seconds later, but in conse-

quence of a foul having occurred on the course, the Referee decided the race a draw. A few days later than this, Daw and Fay pulled a five mile race off Staten Island, for a purse of one thousand dollars, which was won by Fay, in thirty-nine minutes.

On the same day with this race, a Regatta was held at Albany. The first race was for double sculls, and was won by Ward and Shaw, over a three mile course, in 23.20. The second race, for single sculls, was won by Hancon, in 26.17. The four-oared race was won by the Stranger, in 20.11, taking the first prize of one hundred dollars. The race for amateurs was won by the Stephen Roberts, of the Hiawatha Club.

On the 11th of October following, occurred the finest single scull contest ever witnessed in the United States. It was a five mile race, for the Champion Belt and one hundred dollars, and was contested by Daw, Hancon, Fay and Ward. The race was well contested, and was won by Josh Ward, in the tremendous time of 35.10, the best time ever made in American waters. Two weeks later, on the Charles River, occurred a race for the Scullers Championship. Josh Ward won the first prize, over a three mile course, making the distance in 23.16 ; prize, two silk flags and two hundred dollars. T. Doyle won the second prize, one hundred dollars, in 23.26.

The first race of importance, in 1860, was the second Regatta of the Bunker Hill Association, at Charlestown, Massachusetts. The single scull race was two miles, and the first prize was won by M. S. Smith, in 16.42 ; prize forty dollars. Second prize, J. Reed, in 18.01, prize twenty dollars. Olivia took the first prize for single scull lap-

streaks, in 17.20; amount of prize forty dollars. Second prize in this class was taken by the Artless, twenty dollars. In the race for double scull lapstreaks, Wells and Daly made the distance, two miles, in 16.28; prize fifty dollars. The Novice won the second prize, twenty-five dollars, in 16.40. The next race was for six-oared lapstreaks, and was won by the Sophomore Crew, of Harvard, who made the two miles in 14.23, taking the prize of seventy-five dollars. Thetis, also a six-oared lapstreak, was entered by the same class, and took the second prize, of thirty dollars.

On the 24th of this month, the Fourth Beacon Regatta took place on the Charles River. M. S. Smith won the race for single sculls, making the two miles in 14.31, winning the prize of fifty dollars. The race for double scull lapstreaks was won by L'Hrondelle, in 14.24, taking fifty dollar prize. The race for six-oared lapstreaks was won by the Thetis, of Harvard, which made the three miles in 19.37, taking the first prize of one hundred dollars. The Shamrock, manned by the Wood Crew, came in second, in 20.20.

Two days later than this, June 25th, the South Boston Regatta came off. The race for single scull lapstreaks was two miles, and was won by the Olivia, in 15.35, taking the first prize of forty dollars. The six-oar shell race was contested by Harvard and Brown Universities, the Wood Crew in the Shamrock, and the four-oared boat Quickstep manned by the Scott Crew. The course was two miles, and was won by Harvard, in 12.38, to which was awarded a prize of seventy-five dollars. The Shamrock came in second in 13.43; then the Quickstep, and last the Brown University Crew.

Another aquatic fastival followed this, on July 4th, when the Boston City Regatta took place. The single scull shell race was two miles, and was won by M. S. Smith, in 14.02 1-2, the prize being sixty dollars. Reed took the second prize of twenty-five dollars, in 14.21. The race for double scull lapstreaks was won by Doyle and Colbert, in 13.45. Daly and Wells won the second prize, of thirty dollars, in 13.48. The race for six-oared lapstreaks was three miles, and the first prize, one hundred dollars, was won by the Harvard Sophomore Crew, in 19.21. The Thetis, of the Harvard Freshmen Class, won the second prize, of fifty dollars, in 19.37. The next race was for shells, six-oared boats to allow thirty-three seconds to four. In the shell race, the Harvard boat won the first prize, of one hundred and seventy-five dollars, in 18.53 1-2. The second prize, seventy-five dollars, was won by the Riley, four-oars, manned by the Murray Crew, in 21.10 1-2.

Pittsburgh followed the lead of all the other cities where good racing courses were available, and gave a Regatta on the 7th of July of this year. It was under the auspices of the Alleghany Association. The races were for two-oared boats and four-oared outriggers. In the four-oared race there were four entries. The distance was three miles, and was made by the Adams, in 22.33. The Maid of Erin was second, in 22.45. In the two-oared race, the Highland Maid was victorious, in 27.10; the Leader making it in 27.20.

On the 19th of July, there was a four-oared race, three miles, for three hundred dollars, on the Staten Island Course, between the Stranger, of Poughkeepsie, the Charles McKay and Judge Voorhes. This race was won by the

Stranger Crew, in 19.26. The McKay was second, in 19.42.

The next College Union Regatta took place on July 24th. The races were for the Championship and handsome setts of colors. The six-oared lapstreak Thetis, by Harvard Freshman, won the first prize in 19.40 1-2; distance three miles. The Glyuna, of Yale, came home in 20.20. In the Sophomore race, the Harvard Crew went over the course, and claimed the race, in 20.17; the Yale boat being withdrawn. The shell race followed, and was won by Harvard, in 18.53; Yale in 19.05 1-2. Brown University Crew came home in 21.15.

The Citizens' Regatta, at Worcester, succeeded the above, on the day following. There were four races: single scull wherries; double scull wherries; six and four-oared lapstreaks; six and four-oared shells. Single scull race and a prize of fifty dollars was won by Josh Ward, who made two miles in 15.17 1-2. T. Doyle took the second prize, ty dollars, in 15.33. In the double scull race, Doyle and Colbert won in 18.18. Six-oared race, three miles, for lapstreaks, won by the Harvard Freshman, in 20.13; prize seventy-five dollars. The Gersh Banker, of Newburgh, won the next prize, of one hundred dollars, in 18.37; beating the Harvard lapstreak, which made the distance in 19.44 1-2. Yale, six-oared shell, 19.10; prize fifty dollars.

On the 7th of August, a match race took place at Boston, between the Josephine, of that place, and the Mystic, of Charlestown, for a purse of two hundred dollars. Both boats were four-oared lapstreaks, and the distance was three miles. Josephine won the race by a long distance, in 21-16.

August 8th, an Amateur Race, for minors, with two prizes, came off. Blaikie won the single scull two mile race, and a prize of twenty dollars, in 15.40. S. L. Fogg won the second prize, of ten dollars, in 16.43.

On September 5th, the Regatta House offered prizes for single-scull, double-scull and four-oared crews. The prize for single sculls, a hunting case watch, was won by Kinsley, who made the distance, two miles, in 17.15. The double-scull race was won by Doyle and Daily, in 17.34; prize silver ice pitcher. The four-oared race was won by the Undine, manned by the Colbert crew, three miles, in 24.53; prize silver tea sett. The Mystic came in in 25.23.

The Poughkeepsie Regatta was held on the same day with this. Leary won a five mile single-scull race, in 48.26. The double-scull race was won by Donahue and Brown, of Newburgh, in 38.26. The race for six-oared shells was between the Gersh Banker, of Newburgh, and James McKay, of Poughkeepsie. The McKay won the race, in 32.40; the Banker's time was 32.55. The second day the first race was for double-scull working boats, and was won by the Maggie, of New York, in 44.27. Fay won the single-scull race in 39.15. The George W. Shaw won the race for four-oared shells, in 32.55.

On the 29th of September, the Alleghany Association held its Second Annual Regatta. The Moonlight won the three-mile single-scull race in 23.54. In the race for four-oared boats, the Adams won in 20.13; the Princess coming home in 20.15. The next race was for eight-oared barges, and was contested by the Volante, Imperial, Undine and Albatros. The Volante won in 21.15, Imperial coming home in 21.38. The course was three miles, for the champion flag.

The Albany Regatta was held on October 11th and 12th. On the first day, the three mile six-oared race was won by the Bryant, in 24 minutes; the Irving was second, in 26 minutes. This contest was attended with very little excitement, as the result was too much of a foregone conclusion. The race for four-oared boats followed, and was won by the G. W. Shaw, in 21,24. The third race was for double-sculls, and was won by Young and Piepenbrink. This race concluded the festival for the first day. The first race, on the second day was for six-oared shells, and was won by the James McKay, of Poughkeepsie. The Zephyr, of Albany, won the second race, for six-oared barges. The fourth race, for single-sculls, open to all, was won by Josh Ward. The race for the single-scull championship of Albany, was won by G. F. Baker.

On November 5th, Josh Ward pulled a great single scull race with Burger, over a ten mile course, at Poughkeepsie, for five hundred dollars. Much interest was excited by this race, which was witnessed by great numbers of people. Ward won the race and money, in 83 minutes.

On the 23d of the same month, Decker and Fay had a sculling match for a purse of four hundred dollars, at Jersey City, over a four mile course. Won by Fay, in 25.30; Decker coming home in 25.34.

The Annual Citizens' Regatta, at Boston, for 1861, came off over the usual course, on the 4th of July, of this year. The single scull race, two miles, was won by Josh Ward, in 13.53; prize seventy-five dollars. The double-scull race was won by L'Hirondelle, two miles, in 12.54 1-2; prize one hundred dollars. The Stranger won the four-oared race; distance three miles in 20.07, and took the first prize of one

hundred and twenty-five dollars. The Geo. J. Brown took the second prize, of fifty dollars, in 20.16. The six-oar race was won by the Amphitrite, Burnett Crew, in 19.25, taking the first prize of one hundred and seventy-five dollars. The Fort Hill Boy took the second prize, seventy-five dollars, in 20.19.

September 24th, John Biglin and William Stevens had a five mile sculling match, at Poughkeepsie, for two hundred dollars. Stevens won the race, in 38.45.

The Citizens' Regatta, of Boston, came off on the 4th of July, 1862, on the Charles River. Fred Crowinshield won the two mile scull race, for boys under eighteen, in 16.18, and took the first prize, twenty-five dollars. John Tyler, Jr., won the second prize, ten dollars, in 18.14. In the single scull race, for Professional Oarsmen, James Hamill made the two miles in 16.15 3-4, winning the first prize, of seventy-five dollars. T. Doyle took the second prize, thirty dollars, in 16.39. The Edith took the first prize, of one hundred dollars, in 17.06, distance two miles. The Hancon took the second prize, fifty dollars, in 17.33. The race for four-oared boats was three miles, and was won by the Geo. J. Brown, of New York, in 21.01 1-2; prize one hundred and twenty-five dollars. The Tickler won the second prize, fifty dollars, in 21.06 1-2. The six-oared race was the same distance, and was made by the Union, in 22.24, the prize being one hundred and seventy-five dollars. The McKay took the second prize, of seventy-five dollars, in 24.26.

On the 13th of August, of this year, Ward and Hamill were matched in a three mile race, on the Schuylkill, for a purse of five hundred dollars. Hamill won this race in 37.39.

The next Annual Beacon Cup Regatta took place on the Charles River, on the 20th of June, 1863. Hamill won the single-scull race, of two miles, in 18.05 1-2. The Geo. J. Brown won the three mile race for four-oared boats, in 19.40, and took the prize, one hundred dollars.

The City Regatta came off on the 4th of July following, on the same course. The two mile race, for boys, was won by John Tyler, Jr., in 18.18. The single-scull race was won by Hamill, in 15.05. The double scull race was also won by Hamill, in the same time. The Geo. J. Brown won the four-oared race in 20.43. The Biglin Crew won the six-oared race in 20.08.

On July 23d, Hamill and Ward pulled a five mile race for one thousand dollars, at Poughkeepsie. Ward won in 42.29. Their next race was on the 28th of September, at the same place, for the same amount. Hamill won this race in 37.38.

On October 28th, Gil. Ward and William Stevens pulled a five mile race for a purse of four hundred dollars, at Poughkeepsie. Stevens won the race in 39.53.

On July 4th, 1864, the next Boston Citty Regatta took place. J. H. Radford took the first prize for single sculls; distance two miles; time 20.02 1-2. The C. B. H. won the double-scull race, same distance, in 19.08. The four-oared race boat, McClellan, won the first prize in her class, over a three mile course, in 25.30. The P. L. Tucker won the six-oared race, same distance, in 22.04. On the 19th of this month, Hamill and Ward rowed the "rubber" match, at Pittsburgh, over a five mile course, for one thousand dollars. Hamill won the race in 40.46.

The Citizens of Worcester gave a Regatta on the 30th

of July. J. H. Radford won the single-scull race, of two miles, in 16.36. The four-oared race was three miles, and was won by the Geo. J. Brown, in 21. The six-oared race was won by the Biglin Crew, in 19.08.

On August 17th, the Geo. J. Brown, of New York, and Twilight, of Pittsburgh, both four-oared boats, were matched in a five mile race, for one thousand dollars a side. The Brown won, in 33.30.

On the 9th of November, Biglin and Hayes pulled a five mile mile race off Staten Island, for one thousand dollars. Biglin won the race, in 41.12.

On July 4th, 1865, the Annual City Regatta took place on the Charles River. The single-scull race, two miles, was won by James Hamill, in 16.28 1-2. The four-oared race, six-miles, was won by the Biglin Crew, in 43.32. On the same day the Boston Regatta come off, and nearly all the races were contested by the same parties as in the above regatta. The single-scull race, of two miles, was won by Hamill, in 16.28 1-2. The race for four-oared boats, was contested by the Sam. Collyer, of New York, rowed by the Biglin brothers, and the Geo. B. McClellan, rowed by two men from St. John, New Brunswick, and two men from Boston. The distance was six miles, and the prize, four hundred dollars. The Collyer won the race handsomely.

The Milwaukee Regatta took place this year, on July 4th, over a three mile course. The race was for six-cared boats, and was contested by the Dwight Keyes, the Kinnickinnick and the Waucoma. The Keyes and Waucoma were outrigger barges, the Kinnickinnick being a lapstreak skeleton. The Keyes won the race easily in 18.15. The 18th of July witnessed the race between the Sam Collyer, of New York, rowed

by the Biglin brothers and Leary, and the Floyd T. Field, of Poughkeepsie, rowed by Stevens, Burger, Beneway and Wooden, for a purse of six thousand dollars. The race, although it attracted an immense crowd, was not so close as might have been expected, the Collyer's crew winning by a good lead, in 31.10.

The next Regatta of importance was that of the Citizen's, of Worcester. Josh Ward won the single-scull race, and seventy-five dollars. The four-oared race was three miles, and was won by the McClellan, of Boston. Yale and Harvard contested the six-oared race, for two hundred dollars, Yale winning.

Several very interesting races took place at inervals during the rest of this season, the most notable of which was that between the two four-oared shells, New York of New York, and Robert Earl, of Newburgh. The race was five miles, and came off at Sing Sing, on the Hudson, for a purse of two thousand dollars. The New York was rowed by two of the Biglins, Blue, and Eckerson. The Earl was rowed by the four Ward brothers, Josh, Gil, Henry, and Charley. The Ward brothers won in 33.05. The New York's time was 33.47.

On September 25th, the Pittsburgh Regatta took place. The four-oared race was for seven hundred dollars, and was contested by the New York, manned by the same crew as in the above race, and the Friendship, of Pittsburgh, rowed by the two Hamill's, Jackson and Wolf. The race was five miles, and was won by the Friendship, in 32.26. The New York came home in 32.21. This was a very exciting and pretty race.

On July 4th, 1866, we find the Boston City Regatta

recorded. The single scull race, of two miles, was won by Walter Brown, in 17.10. The double scull race and one hundred dollars, was won by the J. Andrew, in 27.49. The Thetis won the four-oared race, and one hundred and twenty-five dollars, three miles, in 20.39. The six-oar race and one hundred and fifty dollars was won by the Una, of Portland, Maine, rowed by Walter Brown, stroke, and five others, in 20.41.

On the 10th of July, Gil Ward and John McKiel pulled a single scull match over a five mile course, at Sing Sing, New York, for two hundred and fifty dollars. This was won by McKiel, in 41.00.

Citizen's Regatta, at Worcester, Massachusetts, on July 27th, the single scull race, two miles was between Walter Brown and Josh Ward. Brown won in 15.15. Ward's time 15.53. The four-oared race was won by the Frank Queen, Walter Brown, stroke, and three others, in 19.41. The P. L. Tucker, manned by the Biglin crew, came in second, in 20.10. The third race was for the Championship of Worcester, three miles, for four-oared boats. The Quinsigamond and the Union contested this race, which was won by the former, in 21.04.

On the 21st of July, a match race between the Friendship and New York, came off at Pittsburgh, Pennsylvania, for a purse of eight hundred dollars. The course was five miles, with one turn. The New York won the race, in 34.24.

August 18th, the second race took place between these boats, over the same course, for one thousand dollars, but the boats fouled, and the race was decided a draw.

On the 5th of September, Fearon, of Yonkers, and Waldron, pulled a five mile, single scull match, for two hundred

dollars, which was won by Fearon, 43.37. On the 18th of September, Walter Brown and Josh Ward pulled their great three mile race, for two thousand dollars, in the Harbor of Portland, Maine. The race was very close, and was won by Brown, in 22.30, Josh coming home in 22.34 1-2. Then, on the 9th of this month, the City of San Francisco, away off on the Pacific seaboard, inaugurated its first Regatta. The single scull race was two miles, and was contested by four boats. The Unknown was the winner, in 18.25. The race for four-oared boats was threemiles, and was contested by four boats, and won by the Union, in 24.00; the Kearsarge being second, in 26.00.

The Springfield Regatta took place on September 20th. The six-oared race was won by the J. W. Dickinson, three miles, in 20 18; prize two hundred dollars. The single scull shell race was two miles, and was won by Josh Ward, in 15.59; McKiel was second, in 16.03. The race for four-oared boats, was won by the J. A. Harding, of St. John, New Brunswick, in 21.08 1-4. The fourth race was a handicap, with an allowance of eleven seconds per oar. The Dickinson won in 19.11 1-4.

In November, two most important sculling matches took place. The first race was between McGrady and Biglin, over the Elysian Field Course, of five miles, for a purse of five hundred dollars, and was won by Biglin, in 39.40.

The other race was at Poughkeepsie, between Gil Ward and Stevens, five miles, for three hundred dollars. Stevens won, by three lengths, in 38.39.

This closed the racing season for this year, and this is, perhaps, a fitting time to close this rather short summary of Boat Racing, from the time of its introduction into the

country, down to the year 1867. From 1865 to 1871, a great many new Boat Clubs have been formed in all sections of the country, of whose races nothing will be said here, but this department will be closed, with a brief history of our College Boat Clubs and Races.

The foregoing history is not nearly so voluminous as it might have been made, but will convey an idea of the gradual growth and development of the Rowing interest in America, up to three years ago. The leading contests, since that date, are sketched in another portion of this Book.

AMERICAN COLLEGE RACES.

HARVARD AND YALE.

The Annual Contest between the selected Crews of Harvard and Yale Colleges, is an event to which the Students, the Alumni, the friends of both, and people, generally, in New England, look forward with keen interest. Since the first University Race, the interest has steadily increased, and these annual displays of college muscle are to the collegians and their friends, what the Annual Fair of their Agricultural Society is to the farmers of New England. The Race is talked of from early in the fall until it occurs, in the July following.

The men who are to represent these old Educational Institutions once selected, the greater part of their spare time for eight or ten months, is spent in training vigorously for the annual bout. People not versed in such matters, can have but a faint idea of the severe and thorough training which these picked crews submit to, for the sake of renown. They are supported, and urged, and cheered, by their fellow students and numerous friends, but the task must, at times, be harder than their studies. As the time draws nigh for the contest, their efforts are redoubled, and they are as good specimens of pluck and muscle, when they at last pronounce themselves ready, as can be found anywhere. This period is always welcomed by the students, who can then throw aside their studies and commence their vacation, with regatta week, at Worcester, the close of which finds them on their way home, exultant o'er the victory, or sorrowful o'er the defeat, of their much praised or badly abused six. Collegians may be divided into three classes: The first is composed of the reserved and thoughtful, who devote their whole time to study, and allow themselves no physical training whatever. Those who are interested in sports and pastimes, and train their bodily, as well as mental powers, form the second. And the third is made up of those who go to college, as they go everywhere else, to have a good time, and who dabble in physical and mental exercises, and indulgences, without caring whether they learn or not—and to whom the incorrigible dullards are an appendix.

The first are graduated with crammed heads and tremendous phrenological bumps, but have the weakest of all weak physical organizations. The second class come out with strong and healthy bodies and brains, and the third class

with fragments of all sorts of knowledge, and an uncontrolable desire to see more of their father's money, which seems to be the sum total of their ambition. The kind of development which training for races gives the rowing students, may, or may not be just what skilled physiologists desire to see—but certainly they stand high in their classes, and are graduated in a thoroughly sound condition of mind and body.

The careful observer in Worcester, to-day can readily perceive the three classes of students above mentioned. They are all here. The Freshmen were glad to throw aside the Greek and Roman Antiquities, their French Elocution and Ethics, and come hither.

The "Sophs." readily forgot their Rhetoric, Geometry, History of Greece, Botany, Chemistry and German. The Juniors rejoice at an opportunity to avoid Natural Philosophy and Latin Exercises; and, the Seniors, just graduated, feel dignified, and patronize the young Freshmen with a suavity, which the latter may well imitate three or four years hence. Here, also, are the law students, who have been considering the various branches of common law, equity, admiralty, commercial, international and constitutional law; or, if commercially inclined, the law of agencies, partnerships, insurance, shipping, etc., etc., in books whose covers, according to Charles Dickens, resemble underdone piecrust, if they resemble anything. Even the divinity student, whose mind is wrapped up in matters theological, and who may, perchance, like many another young minister, budded or budding, have in preparation a criticism on some one of the old theologians (who read the Bible in every known language in which it was ever published, and gave to the

world, in compact shape, the result of years of research and hard labor), which is destined to draw forth applause from some village church or lyceum, has temporarily stopped the dreamy reveries wherein he exults in advance, over the enthusiasm which the boobies who are to hear his essay, will eagerly award him, is here, though he seems downcast and melancholy, as if he were encouraging something which ought not to be. But he is interested in the result, and remains, seeking the company of the medical and scientific students, who are, or should be, more sedate than the high-spirited undergraduates. The Faculty is well represented, the Professors are on hand, and it is seen that the Professor of Greek, who has always here and everywhere been as reserved as a hermit, has, for the nonce, broken his classic shell, and seems wholly engaged in discussing the respective merits of the crews. Every gentleman seems to have had one of those invitations which read: "Your company with ladies is respectfully solicited," as each is accompanied by an almost unlimited number of ladies.

THE RACE.

Punctually, at the appointed time, the Sophomore Crew of Harvard, appeared upon the the Course, the first race being between the Sophomores of Yale and Harvard.

The prize was a National Flag, of silk, upon a staff surmounted with a gilt eagle, and a triangular blue silk flag, one side bearing date, "Worcester, July 29th, 1864," and the reverse, "College Regatta—Sophomore."

The Harvards had been training for about eight weeks, and were "well up," with an average weight of 134 lbs. The Yale boys did not appear until the signal was given. The Crews were as follows:—

HARVARDS—1866.

Fred. C. Field, (Stroke.)	S. A. B. Abbott,
Ed. V. Wilkinson,	Ed. H. Clark,
Wm. Blaikie,	Chas. H. McBurney, (Bow.)

Costume—White shirts and handkerchiefs, trimmed with red.

YALE—1866.

C. Rosevelt, (Stroke.)	L. D. Bulkley,
A. B. Herrick,	C. F. Bacon,
J. Pierson,	C. F. Brown, (Bow.)

Costume—White shirts, trimmed with blue, and blue silk handkerchiefs.

The course was a mile and a half and return. The Umpires for both races were: Harvard—Richard H. Darby. Yale—Wm. Wood. G. W. Bentley, of Worcester, Referee.

At 4.13, the word "Go!" was given, Harvard having the outside. Yale started off with about forty-one strokes the minute, and appeared to gain on every stroke. As long as the boats were in sight of the Judge's seat, Yale appeared to lead. Harvard, when a long way up the course,

stopped for a few seconds to fix their cushions, but soon went ahead again. On the return, Harvard was leading, and came home easy victors, pulling their long stroke. The time was: Harvard's, 19.05. Yale, 20.16.

UNIVERSITY RACE.

The Harvard crew were supposed to be the best in the College. The Yale Students disparaged their crew as a bait for bets, stating that they had not practiced long enough, etc., etc. The Trainer said that they were in good condition, and if beaten, it would be by better men. The boats were from the same builder, James McKay, of New York, and were, as in the Sophomore race, both Spanish Cedar shells. The average weight of the Harvard boys, was about 156 lbs.; that of Yale 149. Harvard was out for a half hour before the time, probably to their disadvantage. Yale did not appear until the signal was given.

The distance was a mile and a half and return, and Harvard was on the outside. The crews were—

HARVARD.

H. G. Curtis, (Stroke,)	J. Greenough,
R. S. Peabody,	E. C. Perkins,
F. Nelson,	Ed. Farnham, (Bow.)

White shirts and red handkerchiefs.

YALE.

W. R. Bacon, (Stroke,)	E. B. Bennet,
M. W. Seymour,	E. D. Coffin, Jr.,
L. Stozkoff,	W. W. Scranton, (Bow.)

Flesh-colored shirts and blue silk handkerchiefs.

At the word, both boats started well together. Yale pulled quick and Harvards more rapidly than the Sophs had done; both boats kept well together, apparently, and did not deviate from the course. When the boats finally disappeared, neither side appeared to have the advantage, and the betting was even. When the boats again came in sight, Yale was ahead, coming right down the course, while Harvard appeared to have gone off to one side. Thundering cheers arose on every side as the victors came to the goal. The Yale boat came in handsomely ahead, winning the race and the championship.

Time: Yale, 19.01. Harvard, 19.43 1-2. The Old Harvard, in 1860, made the distance in 13.53.

CARNIVAL OF COLLEGE SUCKLINGS.

There is a story extant concerning some firemen, who wished to have their engine painted. The matter was considered by them for some time, when one of them, more noted for his muscle than his brains, settled this question

by saying "well boys lets have it painted any color, so long as its red.

The Harvard students seem to act on this principle, as bushels of ribbon of all widths and shades of red disappear from the shop windows and appear as hat-bands, neck-ties, and button-hole ornaments upon the streets previous to the Annual Regatta. The Harvard Freshmen particularly make very liberal displays and wear more than all the other classes combined. A Harvard Freshman, generally speaking, is such a concentration of impudence and audacity as no other college or locality but Harvard and Boston vicinage can produce. On their arrival at Worcester they register their names with immeasurable flourishes in some such fashion as: "Junius Augustus Fitzpatrick, Class of '71." This done, they immediately ask the hotel clerk how the betting is going on the Freshmen Base Ball match, supposing that all Worcester is agitated on this question, and that the clerk was dying to impart a dozen columns or so of information. They become disgusted when they find that Worcester hardly realizes that they are to figure in Regatta week at all. The contrast between the Yale and Harvard Freshmen is quite noticeable, the former being for the most part quiet, while the latter are noisy and boisterous.

A Harvard Freshman, it is said, may generally be distinguished by his indiscriminate use of the word "d——n" and an air of affectation and superiority which marks the unsophisticated stripling who aspires to be a man long before his time.

Usually, the Freshmen and "Sophs" amuse themselves by throwing bottles, tumblers, chairs and every movable missile out of the Bay State windows, and damaging the sash,

smashing, doors vases, and such stationary furniture, as the combined strength of three or four of them cannot move. The Annual Regatta Concert, which is always an enjoyable and "recherche" affair, over, the crowd of undeveloped boys hasten to the hotel; but the presence of a squad of Policemen in the hall, sometimes quiets them down and calms their riotous spirits in a slight degree. Once in their rooms, however, they set up a prolonged howl, which echoes through the hotel, and brings to their senses hundreds of quiet people who have long before gone off in sweet repose. The quantity of beans thrown out of the window, as a general thing, indicates that Worcester people will lose their matutinal meal upon the following Sunday, unless their grocers procure a new supply of this popular food. The supply of bottles is, comparatively small, but what there are, are thrown through the windows into the rooms of guests, with a freedom and accuracy which tells with wonderful effect, and is sure to cause a volley of oaths from the disturbed, which would discount a pirate crew.

This generally proves too dull and tame an amusement for some of the students, who become disgusted with its want of interest, and adjourn to the street, and commence knocking down sign-boards, door-bells, etc., on their way to a neighboring stable, where one of their favorite tricks, because the one by which they can make the most noise and damage the most property, is to steal one, or, if two or three, so much the better, large lumber wagons, which are pulled up to the top of a very steep hill somewhere in the vicinity, and then started pell-mell, one right after the other, down the hill, at a fearful pace, amidst the hideous, and worse than Choctaw, yells of the students.

The wagons go careening down the hill, damaging Worcester's favorite elms, fences, flower gardens, etc., and occasionally running smack into a house, which, if the wagon does not go clean through it and kill all the inhabitants, will startle them into the belief that they "have awoke unto Judgment."

This, and the like kind of pranks, usually leads to the arrest of some of the more prominent among the sports, and when this happens some funny scenes are very often presented at the "arraignment." One young scapegrace, with the smallest of small pantaloons, and the most insignificant of undeveloped foreheads, accosts the Marshall in this wise: "See here, Mister Stick-in-the-mud, we're three hundred strong, and we'll wallop the feed right out of your force, if you don't let us go."

Those who remain at the Bay State, and confine themselves to the "bottle and the song," enliven the weary hours in a manner such as a Harvard student knows how to do. The plaintive strains of "Champagne Charlie," "Mother, may I go and Swim," "Kaizer, Don't you want to buy a Dog," "Mary had a Little Lamb," "I wish I was a June Bug," etc., etc., echo and reecho through the halls the livelong night.

The rooms of the sports are a spectacle, indeed, during this night of debauchery. "Gentlemen, for a night" are reclining in arm chairs, and chairs without arms. Boots and shoes are cocked recklessly on tables and stands, amongst wash-bowls, vases, lamps and glasses.

Cigars are plenty, and no one takes the trouble to spit in the spittoon, preferring rather to spit out of the window, and perhaps have the satisfaction of seeing it light on some

passer by, who, knowing the folly of attempting to get any satisfaction, generally contents himself by crossing to the opposite side of the street and performing a series of pantomimes, to the intense delight of the boys from school. This riotous behavior of the students is a plague to those who attend the races for the purpose of enjoyment.

HISTORY OF HARVARD ROWING.

A good many years have elapsed since boating was first introduced into Harvard College, and it is doubtful if that venerable individual, the "oldest inhabitant" of the College walls, could fix the precise date of the organization of the first Boat Club.

Certainly, Harvard was one of the first institutions of learning in the country, to adopt boating as its chief and constant recreation, and it has cultivated, encouraged and nourished it, in a way worthy her great name and great men.

It is, however, well known that as early as 1844, a boat was purchased by a number of the students, which had previously been known in the Chelsea Regattas, as the Star, but which was rechristened the Oneida, a name that has ever since been borne by one boat or other of the Harvard Navy. This boat was manned with eight oars, and was con-

stantly in use, until the class of '58 disposed of her, retaining the name and colors. She was held by her new owners for about one year, and was then disposed of to an outside Club.

The excellent progress which the Oneidas' were making, inspired their brother students in the Senior Class to attempt the formation of a Club. They purchased an "eight," thirty-eight feet long.

In 1845, the Freshmen bought a boat called the Undine, and in the next autumn a new boat was purchased by the class of 1847, which was forty feet long, and rowed eight oars. Thus, the College owned four boats in about fifteen months. The Oneida, up to this time, was the only one that knew the luxury of a sheltering roof. Before the arrival of their new boat, the Club had purchased an old boat house, which, after fixing up a little, was to be her home. The other boats of the College, the Undine, Huron and Iris, had always been moored near Brighton bridge. A boat-house was erected in 1846, eighty feet long; each club paid thirty dollars a year for the use of it.

All of the Harvard boats were placed in this house, which, when the new boat came, was "filled up." The new boat was a six-oared gig, twenty-six feet long, with stern-sheets. She was much heavier and stronger than any of the others, and most too heavy to be called a race boat. The Freshmen class of 1849, bought the old boat of the Oneida Club. The Oneida Club built a new boat, the Atalanta.

The first boating contest in which Harvard was engaged with outside boats was between their boat, the Huron, and a boat from Boston, called the Wave. It came off over the Cambridge course, in 1848. An eight-oared boat was pur-

chased, called the Ariel. The Oneida was still owned by the class of 1849. And the Undine was bought by a club in the class of 1850, after her former owners had graduated. In 1849 there was bought by the "class of 1851," an eight-oared boat called the Halcyon. In the autumn of 1849, the Harvard boats were : Undine, eight oars ; Ariel, six oars ; Halcyon, eight oars ; Oneida, eight oars. There was also a small pair-oar named the Viola.

There was quite an excitement in 1847, over the great race to take place between the Oneida and Undine, over the Cambridge Course, in which the Oneida won handsomely.

A race also took place between the Oneida and Huron, in which the Oneida also won. In 1849 and 1850, the clubs just named were in excelent condition.

When the Undine crew graduated, they sold their boat to a Boston Club. The Ariel crew were disbanded, and their boat was sold to some parties in East Cambridge. The Halcyon Club continued to flourish until they graduated, when they sold their boat to a Yale crew. From 1851 to 1854, the Oneida was the only occupant of the Harvard boat-house. But between these years occurred the first rowing match with Yale College, at Centre Harbor, on Lake Winnipiseogee, August 3d, 1852.

Harvard had the Oneida crew, Yale the Shawmut, Undine, and the Atalanta. In the first match, in the morning, the Oneida won, and in the afternoon she came in first, likewise, and received as a prize, the black-walnut oars, which are now in Harvard Hall, among many other trophies.

After the class of 1853 had graduated, they sold their boat and boat-house, to the next lower class of '54 and '55. In

1854, an eight-oared boat was built for the class of 1856, called the Iris. A floating boat-house was made for their Club, and stationed near where the boat-house now is, but it went to pieces, and the Club bought one-half of the Oneida's house.

In 1855, the Oneida was bought by a class of Freshmen of 1858, and the Iris was sold to the class of the next year, who changed her name to Huron.

In the spring of 1858, the Iris Club purchased a new boat, forty feet long. In the spring of 1856, there was rowed at Springfield, on the 21st of July, the second race between Yale and Harvard. The prize was an elegant sett of colors. The time allowed was eleven seconds per oar. There were entered four boats—Iris and "Y. Y." from Harvard, and the Nereid and Nautilus, from Yale. The Iris came home first, in 22 minutes; "Y. Y." second; Neried third; Nautilus last.

The success with which the "Y. Y." was managed by the bow-oar, influenced most of the crews to steer their boats without coxswains. A change of ownership in the Iris and Oneida caused the name of the latter to be changed to that of Minnehaha. The "Y. Y.," the Undine and the Huron, were also sold to other classes in the College, the name of the Huron being changed to that of the Lotus. The Theological students soon after procured a six, which they dubbed the Orion.

Two new boats, a six and an eight, were built this same year, for the Oneida and Huron clubs. But the "loudest" event in the history of this eventful year, at Harvard College, was the race at Boston, on the 4th of July, in which the "Harvard," built at St. John, by Coyle, and

carrying eight oars, won the second prize. The following spring the Minnehaha was sold, and the club purchased a new six, the Camilla. During the spring and summer of 1857, there were two important races engaged in by the Harvard Clubs. The first was the Huron, against the Volante, of Boston, for a suit of colors. The race was won by the Volante.

In June, in the Regatta on the Charles River, the "Harvard" eight was beaten by the Union, of Boston, six, because of having to allow time. The following fall, the old Harvard, which could not be entered to advantage in the contests, was sold to the students of Columbia College, N. Y., and a new light "six" procured.

In June, 1858, at the second Charles River Regatta, the new boat won the three-mile race in nineteen minutes and twenty-two seconds.

In July 1859, the first College Union Regatta was held on Lake Quinsigamond, in which were entered the Avon and Harvard, from Harvard; the Yale from Yale; and the Atalanta, from Brown University. The Atalanta and Avon were lapstreaks; the Yale and Harvard being shells.

The distance was a mile and a half and return. The Harvard came home the winner by about five lengths. The Yale was second; the Avon coming next, and the Atalanta bringing up the rear. Harvard's time was 19.18; Yale 20.18; Avon 21.13; Atalanta 24.40.

The next day the Citizen's Regatta took place, and the Harvard and Yale were the only boats putting in an appearance, although the Avon and Huron had both been previously entered. The race was quite exciting from the first, Harvard showing a little ahead at the start, but Yale

managing to creep up and turn the stake a length or two in advance. Yale won in 19.14. Harvard 19.16. At the Boston City Regatta of 1860, in the race for fours and sixes, shells, Harvard entered with three Boston boats, and won in 18.53 1-2. At the Boston City Regatta, of 1860, in the race for fours and sixes, shells, Harvard entered with three Boston boats, and won in 18.53 1-2. On the 24th of the same month College Union Regatta No. 2, came off. In the first race, the Thetis, of the Harvard Freshmen Class, defeated with ease, the Glyuna, of Yale Freshman Class. In the next race, the Harvard Sophs. defeated those of Yale. The third and last race between Yale, Harvard and Brown, was won by Harvard in 18.53. In the Citizen's Regatta, the Harvard Freshmen entered the Thetis, the Yale Sophs the Thulia, and the Harvard, Sophomore. A foul occurred between the Harvard and Yale Sophs, the Yale crew returning and the Harvards pulling over the course, and coming home in 19.44 1-2; Freshmen, 20.13.

The foul was decided against Harvard, but no prize was awarded either boat.

At the Harvard Regatta, in June, 1864, there was a race for club boats; won by the Sophomores in 20.20. Two days afterwards the race was repeated, and was won by the same crew in 19.50.

On the 29th of the same month, the College Regatta came off at Worcester. The prize was a silk flag for the winner of each race, and was contended for by the Harvard Sophomore crew and Yale Sophomore crew, and was won by the Harvards in 19.04. The University race then came off, the Yale crew taking the lead at the start and winning with ease.

In the Citizens' Regatta, which followed, the Harvards were beaten six seconds by the Tucker, of New York.

At the Harvard Regatta, July 5th, 1865, four six-oared shells entered, and the race was won by the Junior Class, in 20.43 1-2.

YALE COLLEGE ROWING.

The students of the twin Colleges of America appear to have discovered an interest in boating at about the same period, as we read of the Yale men having purchased a boat in 1843, which was used for one year, and then disposed of. In the same year, a "four" was purchased, named the Nautilus. She was what was then known as a Whitehall boat, nineteen feet long. The "nobbiest" craft, however, in the Yale fleet of this period, was an eight-oared "dug-out," forty-two feet long and twenty-four inches beam, which, from her model, was styled the "Centiped." The crew of this boat had a race with that of the Nautilus, which boat, in the opinion of the former crew, trimmed too much "by the head," which was a fault very common in those days, and which the crew of the Centiped kindly remedied on the night preceding the contest, by making fast a huge boulder to the after-part of the keel of the Nautilus, that boat, as a natural consequence, coming in

behind. The first craft really entitled to the name of race-boat ever received at Yale, was a six-oared thirty-foot boat, purchased in 1844.

An eight-oared barge, thirty-eight feet long, was purchased, second-handed, in 1847. She went off one night, in a gale, without her crew, and was cast away on Long Island.

Between the years 1848 and 1851, two other boats, both eights, were owned by Yale; one an old thirty-six feet boat, built in 1838, and the other a thirty-eight feet boat, built in 1837. The latter was clinker-built, of red cedar, and was handsomely furnished. She also was cast away.

In 1851, a boat twenty feet long pulling four oars, and called the Phantom, was purchased and retained for one year, when it was disposed of in trade, with "boot," for the "Undine, which name now haunts every water-course in America.

From 1851 to 1855, several new boats were added to the list already quite numerous. The first of these was a fine barge, pulling six oars, named the Atalanta.

The next boat was one year old when purchased, pulled eight oars, and was used for three years by her owners, who scuttled her at their graduation, and sent her a-drift. She was recovered, however, by another class, and at a slight expense, refitted for use. Two years later she cast herself upon the shore and went to peices.

In 1852, a ship which had won two races respectively in New York and Savannah, was purchased at Yale and rechristened the Ariel.

The year 1853 witnessed an addition of two boats to

the Yale fleet, viz: The Thulia a six-oared barge, and the Nepenthe, a thirty-five foot boat. This latter boat, one year after its introduction to Yale, broke loose, like so many of its predecessors, and placed its carcass alongside those of its comrades, in the grave-yard of the Yale Navy on Long Island.

In 1853, the following boats were owned by Yale, to-wit: The Thulia, the Engineers, the Halcyon, and Ariel.

The first review in which all of the above boats took part, more was held in 1853. In the following year, four more boats were added to the fleet; two forty feet race boats, the Nautilus and the Transit, a thirty-five feet four-oared race boat, the Rowena, and a pleasure barge, named the Alida, thirty feet long.

The fleet being now pretty large, but one addition was made in the next two years, which was a six-oared racing boat, the Nereid.

During 1856 and 1857 several changes were made, the Rowena and Undine, being removed from the Navy, and the names of two others of the boats changed.

In 1858, however, a sort of reaction appears to have taken place.

During this year, five craft, of different dimensions and classes, were placed in the House. They were a clinker-built four-oar, without Coxswain, named Olympia; clinker-built six-oar, named the Yale; a six-oared barge, the Varuna; and the Cymothœ and Lorelei, six-oar race boats.

The first of the "Yale Commencement Regattas" took place in 1853, and was participated in by four boats.

The next Regatta was in 1854, in which four boats pulled.

The Third Annual Race came off at Springfield, in July, 1855. Five boats pulled, the course being three miles, with one turn, and the race was won by the Nereid.

The Fourth Annual Race race occurred in October, 1856, four boats pulling, over a course somewhat less than three miles in length, the best time being twenty-one minutes and twelve seconds.

The Regatta of 1357, brought three boats to the line two sixes and an eight, the course being reported as more than three miles, and the best time made being 22 minutes and fifty-two seconds, by the Nereid.

The first "Inter-Collegiate" Regatta took place in New Hampshire, at Centre Harbor, Lake Winnipiseogee, of which an account is elsewhere given.

The Second Union College Race came off in 1855, at Springfield. Yale entered the Nereid and the Nautilus, with Coxswain.

Harvard was represented by the four-oared boat "Y. Y.," and the Iris, the former without Coxswain.

The race was a handicap, of eleven seconds per oar, the distance being three miles, with one turn, and was made in the following time: Iris, 22 minutes; "Y. Y." 22.47; Nereid, 24; Nautilus, 25 minutes.

Yale College held her Sixth Annual Race in July, 1858, in which were entered the Olympia, Varuna, Nereid, Omicron, and a shell, by the Scientific Class, without Coxswain. The Varuna, which was also a shell, without Coxswain, won the first prize.

The first race, of 1859, was between the Varuna and the Olympia, and was won by the Varuna.

The first College Union Regatta between Harvard, Yale,

Brown and Trinity, took place at Worcester, July 26th, 1859. The following boats were entered: Six-oared shell, "Harvard," by Harvard College; "Avon," six-oars, lap-streak, Harvard College; Brunonia, six-oars, Brown University; "Yale," shell, six-oar, Yale College. Harvard was victorious in 19.16. Yale, 20.16.

The next day the first "Citizen's Regatta" came off, and was participated in by two sixes, one from Harvard and one from Yale. Yale won this race in 19.14; Harvard's time being 19.16.

In 1860, the Second College Union Regatta came off at Worcester. In the first race, the Harvard Freshmen defeated Yale, by 19.40 1-2 to 20.20.

On account of one of the Yale Sophs. taking sick, the crew were unable to pull, and so the Harvard men went over the course and claimed the race, making it in 20.17.

In the University Race, Harvard, Brown and Yale all came into line. Harvard led off, and never went back, winning in 18.53. Yale, 19.5 1-2. Brown, 21.15.

At the Citizen's Regatta, the following day, the Gersh Banker, from Newburgh, beat Yale as follows: Banker, 18.37, Yale 19.10. The Freshmen, of Harvard and Yale, also brushed this day, with the following result: The Thetis, Harvard, taking the prize on a foul.

Practical Rowing.

PRACTICAL ROWING.

To become even a passable oarsman, requires long and continual practice, and to become a first-class oarsman, requires, besides these, a certian amount of natural skill, to enable the oarsman to adapt his powers to the work he has in hand.

This was not so much the case, a few years ago, when the race boats were large and roomy, being, for the most part, what are termed outrigger barges at the present day, but in the delicately constructed shells in which most all races are pulled now-a-days, it is absolutely necessary for a man to be wide awake and prompt in his movements, as a "crab" would be fatal to a crew under full headway, in one of these crafts.

There are a great many different theories respecting the correct manner of pulling an oar, as there are also a great many different styles of rowing; but all first-class oarsmen agree upon certain essential points, all of which are to be embodied in the directions to oarsmen about to be laid down.

It is, of course, to be supposed, that before entering a shell boat to pull, that the crew have practiced sufficiently long in larger and heavier boats, to learn all but one thing, viz: How

to apply all their united strength, and to balance the shell at the same time.

They should have learned how to feather, how to sit steady in the boat and pull, how to use the body, arms, and legs, and all the other essentials to a good style of rowing. Detailed directions will now be given upon everything pertainig to rowing, by a practical application of which it is hoped that all may attain to at least a creditable profiency in the great international recreation of boat rowing.

INITIATIVE.

Before entering a boat to pull with, or as, one of a regular crew, the party should take some practice in a single boat ; it matters not particularly what style of boat is used, so that it be not a skiff, and is not supplied with stationary oars, as rowing in such a craft as this would be worse than no practice at all.

A common Whitehall boat, such as may be found upon all of our lakes and rivers, is the best boat in which to take the initiative step, toward becoming an accomplished oarsman. The party should select a good boat suited somewhat to his own size and length of reach, and being provided with a tolerably light pair of sculls, seat himself in the middle of his boat —that is in the middle of the thwart, and having placed his feet against the stretcher, in such a manner as that, in pulling, his oars will just clear his knees, and having grasped the sculls firmly in his hands, thumb underneath, throw his body foward until his hands are almost even with his toes, then, dipping the sculls just deep enough to cover the blades, put all the strength into the pull, until the oars are brought

to a right angle with the body, and the "stroke" is completed.

After the rower has obtained sufficient practice to pull a good, even and tolerably regular stroke, with the body and arms, he should learn to utilize the muscular power of his legs. In order to do this, two leather straps may be attached to the foot-board or stretcher, into which the feet may be slipped, and thus enable the rower to bend his legs, without endangering a loss of balance.

After this, at every additional lesson, he will learn something new, and will shortly be ready to take his place in a boat with others, for

CREW PRACTICE.

The majority of Boat's Crews in this country, are either fours or sixes, and the manner of practicing and training them is precisely the same. Race boats proper, at the present time, are of three kinds only: Lapstreak Skeletons, Wooden Shells, and Paper Shells.

Outrigger Barges, as also gunwale-rigged boats, are often used for racing purposes, but they cannot properly be termed race boats, as all race boats are covered fore and aft, outrigged, and built only to sustain a specified weight. In most of the lapstreak skeletons, it is necessary to trim the boat, by sitting close against the opposite gunwale to that upon which the oar is pulled, so that if the boat was originally perfectly balanced, it must always have an equally balanced crew, otherwise rocking will be the consequence. In wooden and paper shells, there is seldom more than enough room for a man to get his body into the boat; so that

"trimming" in a shell, means for a man to balance himself perfectly, and pull "in the boat"—that is, not to swing his body in a lateral direction, but fore and aft. Shells are generally built for certain crews, adapted especially to the weight and reach of the men, and will, if perfect, balance in the water, if the oars are placed in their respective locks.

To pull in the delicately constructed shells of this day, requires much more skill and accuracy of motion, than to pull in a lapstreak; and, indeed, it is anything but a foregone conclusion that, because a man pulls well in a heavy boat, he will pull well in a shell, as some men can "never" become sufficiently true and graceful in their movements, to make good pullers in a shell.

Nevertheless, the proper way to become a good puller, is to practice first in a large boat, as, if one is a poor puller in a stiff boat, he can hardly expect to pull well in a shell.

The positions of the men in the boat will, as a matter of course, depend upon the kind of boat it is. If a lapstreak of the kind mentioned, each man should sit jam against the gunwale, the body very nearly straight, the head well up, with the eyes looking straight aft, and not out of the boat. The shoulders must be squared so that the chest will not "drop," the body being at ease and the shoulders having full play.

The body should not sway from side to side, nor should the arms come back "chasing each other." The position of the hand upon the oar is something that requires a great deal of attention as, unless the hand is properly placed, cramped fingers will make the pulling hard work. There

are different notions in regard to the proper position of the hand, and perhaps most every oarsman will find out for himself the manner in which he can best use his hands, and yet it may be proper to state that the hands should, in a majority of cases, grasp the oar about six inches apart; and a great many pullers do better by elevating the thumb of the outside hand, as it is claimed that additional power is thereby gained. Whether this is, or is not the case, every one will be capable of judging for himself. The elbows, during the recover, should be thrown well forward, and in the pull, be brought back close to the sides.

The time to put on the power, is when the oar is exactly parallel with the boat, and the pull should be continuous and uniform, from that time until the finish.

One of the greatest differences of opinion among boa men, is upon this very subject of when the power may be applied to the oar with the greatest advantage; and, as on account of "other things not being equal," it is impossible to settle the question, every person must decide, as near as possible, for himself.

But if he desires to take advice upon the subject, he had better follow that above given, of putting on the pressure just as the oar squares the waist. The reach forward is an important point to learn, and if not thoroughly understood, will inevitably cause a fatal mistake in the style of the rower. As the arms extend forward, the handle of the oar should weigh over the instep, but should not pass beyond the toes, as when a man overreaches, he loses power, from having the oar enter the water at too great an angle. From bending so low, also, the muscles of the diaphragm are cramped, and respiration is impeded, so that by ove

reaching not only is there less muscular force to apply, but there is also less wind to accompany the application.

The legs should accompany the motion of the body simultaneously, without any rocking motion and without any interfering with the motion of the arms.

The arms and wrists must be straight and stiff as the blade is placed in the water, at which time it—the blade—should be perfectly straight, inclining neither fore nor aft, as in case it inclines aft, the stroke will be a poor one, and if there is much speed on, will very likely cause the rower to slip from his seat and put the others out. On the other hand, if it inclines forward, a "crab" is very likely to result, from the fact that the inclined blade offers an irregular surface to the water, and the pressure is thus unequal.

The "recover" should be simultaneous, on the part of every member of the crew, and should be proportioned to the number of strokes pulled per minute. When what is termed a "spurt" is made, that is, when the stroke is to be quickened, the stroke should not be shortened, but the recover should be more rapid. The stroke should be regular, neither too long nor too short—but suitable for the crew. To set and maintain a stroke that will suit a crew such as we generally see pulling, is a work of no small difficulty. One man has long legs, another short; one man has short arms, another long. Yet the stroke must be uniform, and at the some time not too long for any one.

The stroke oarsman should be a man of judgment and experience, and one who will not commit the grieveous error of setting too long a stroke, as men, after hearing the short, jerking stroke, so much condemned, feel that the

longer they make the stroke the nearer they get to perfection. A long armed man can accommodate himself to a stroke within his reach, but it is an utter impossibility for a short armed man to pull outside of his reach.

To be sure, the crew should be as nearly as possible composed of men of the same, or nearly the same, build, but it often happens, that a man selected for a crew, on account of his superior strength or skill, is either too short, or too long, and where several such men of different deficiencies are in a crew, it requires nice calculation on the part of the stroke oarsman to give the right "card."

An English work upon rowing published many years ago divided the subject into three parts for consideration; first the Seat; second, Holding the oar; third, the Stroke. A man should sit well above his work in order to command it properly. The datum for ascertaining the height at which this advantage is obtained is the following: In a properly constructed boat the thwart is placed midway between the heelboard and the sill of the rowlock. When a mat is added the man is sufficiently elevated to sit well above his oar's handle, and to wield it with facility. If he sits too low he will row with a rounded, instead of a straightened back, and incur loss of power. If he sits too high he will be himself unsteady and liable to roll; he will also make the whole boat unsteady by unduly raising the centre of gravity.

He will also alter the angle at which the oar lies over the gunwale toward the water; the least inclination is the best. The most commendable form of rowing mat is a thick twilled flannel, wound several times around the thwart, quite flat and extending several inches beyond the space actually covered in sitting. It is tied by two broad tapes fastened in

a bow, underneath the thwart and against its forward edge.

Half the miseries of rowing men, and half their faults result from the maladjustment of their seats. They were seldom, until within a few years, flat enough, nor long enough, and usually, the thwart itself was too low. Of late years, however, the improvements made in the art of boat building have obviated most of the objections put forth ten years ago, when boating was in its infancy.

FEATHERING.

To see a well-proportioned, well-trained boat's crew pulling at good speed, and feathering in unison, is to see a sight worth looking at, and one which never fails to gladden the heart of every true oarsman. The oar is feathered just as it leaves the water at the finish of the stroke. The blade leaves the water at an angle of about fifty degrees, and is feathered by a slight depression of the wrists towards the body.

As to the position of the blade after it is feathered, and while traversing the air for a new stroke, it is best to preserve a medium between a perfectly horizontal line close to the water, and a great elevation above it in a long curve. A high toss, composed of a single straight line up to the point of culmination, is quite inadmissable.

When water is rough and lumpy, or when it is thrown up in a mass by a strong man behind, there is danger of catching it, if the oar is low, while recovering forward in a high curve, catches the wind, causes an ugly flop in the water, instead of the clean, unsplashing cut, and involves a certain waste of labor.

A very gentle curve is the most commendable form, and as it is attained by a simple and inexpensive motion, and ensures safety in rough water, it is to be preferred. By a very slight depression of the hands, the blade is a little raised at the beginning of the traverse, and by a subsequent check to that depression, it descends gently to the surface without any hang or splash.

It is very essential that a crew be taught to feather with exactness and on time; as, upon their success in feathering depends much of the beauty and efficacy of their style.

Much more might be, and has been said, by different writers, upon the subject of feathering, but I am of opinion that if what is herein given, as the correct style of feathering, be put in practice, there will be no occasion to regret having followed it. Rowing men have different opinions upon the subject of feathering, as upon everything else connected with the practice of the art; the Oxford men, for instance, feather quite high, while Cambridge, on the contrary, just skim the water, and although the "form" of Cambridge, or as we call it here, the "style," has been even fanatically condemned, yet it vanquished that of its proud compeer last season.

But whatever the "style" of the feather, whether it be high, low, or medium, it should be practiced until nearly perfect.

There are a great many faults committed by oarsmen, not only as beginners, but oftentimes, after seasons of practice, which have been catalogued over and over again, with the correct manner of doing the work, much as a homœopathic physician catalogues diseases with the appropriate sugar pill which is to effect the cure.

Perhaps the following advice, in verse, may not be out of place here as setting forth, in a few words, the secret of good rowing :

"Catch your stroke at the beginning,
Then let legs with vigor work;
Little hope has he of winning
Who his stretcher loves to shirk.
Let your rigid arms extended
Be as straight as pokers two;
And until the stroke is ended
Pull it, without jerking through."

CORRECTING FAULTS.

Notwithstanding the fact that the faults of rowers have been so many times explained and published, there appears to be among many of our amateur crews so little attention paid to their correction, that it becomes a duty for me once more to expose the manner in which pullers either shirk purposely their share of the work, or from ignorance of the correct manner of rowing, expend their strength in the wrong way.

Not keeping time is a grievous fault, and one very difficult of detection. A practiced ear will generally detect a slight want of accord, for though the time may be seemingly very good, there is a barely perceptible difference in the sound produced by an oar doing its duty, from that made by a shirker.

This should lead the coxswain, if there be one, and if not the stroke, to examine the oars himself, and by careful inspection he cannot fail of detecting the "loose screw." In a six

oar, the difficulty to a coxswain of watching a crew and correcting their faults, is almost insurmountable; and where there is no coxswain, and the stroke oar is captain, there are so many difficulties in the way as to make it utterly impossible.

I say that in a "six," or even a "four," where the work of detecting the faults of a crew devolves upon the stroke, it will be but imperfectly done, and then even, at the expense of other mistakes in the stroke himself, who has enough to do to see that his stroke is what it should be.

By what means then is a crew to become good pullers and have their deficiencies pointed out to them? Manifestly, there is only one way, and that is to have the trainer accompany the crew in another boat, or if it is a narrow river or stream on which the crew is pulling, he may run along the bank, the crew pulling slowly, so that he may be able to detect all their faults. If no regular trainer has been employed, the coxswain, if there be one, and if not some other competent party, should take his place.

This plan has been regularly pursued by many of our best crews, and it scarcely needs a lengthy argument to convince any one of the benefits to be derived therefrom, or, indeed, it might almost be said of the absolute necessity of adopting some such plan.

In England, they never think of entering an "eight" in a race, that has not been trained, or as they call it, "coached," in this manner. It is true, that in many of our crews, every man is heart and soul in the contest, and not in the slightest degree disposed to "shirk," intentionally, and yet many a man may be doing the very best he knows how, and then be pulling very poorly.

Making the latter part of the stroke in air, is another mistake, that needs close looking after, and will often be found to accompany the first named.

Round rowing is not dropping the blade at once to its proper depth, but describing a segment of a circle, and thus, having to bring the oar up out of the water to feather, by which the boat is dragged under and her way impeded. Do not row with the elbows bent, either when on the stroke or the feather, or both. Do not keep the elbows out too far from the sides, as, although some very good oarsmen commit this mistake, it doubtless in them merely looks bad, but there is generally less force applied to the oar in that way than by keeping the elbows close.

Looking at the oar, or at any other object out of the boat, should be sedulously avoided, as this leads to uneven swinging, and often causes the catching of crabs, which is the very thing that many suppose they will avoid by watching their oar. After a certain amount of practice, there will be no difficulty in keeping "eyes in the boat," and at the same time keeping perfect stroke.

The twisting of the neck, in looking out of the boat, also tires and cramps the muscles, as any one may satisfy himself by trying it, and great inconvenience and weariness is thereby occasioned.

There is also another phaze of this fault which is, during races, the looking around at passing objects, or observing the course of the coxswain, or at the competitors in the race. The coxswain will be able to attend to his business, and if he is not, the crew will rather hurt, than benefit their chances, by paying any attention to what he is doing.

Dropping the head down between the shoulders so that

the chin rests upon the breast, is one of the most serious, as it is also about the most universal and constant, of the mistakes made by inexperienced oarsmen. This affects the work of the rower in a variety of ways, the first of which is, that it greatly impedes his respiration, and shortens his wind, without which his muscle will be of little avail.

In the next place, he is liable, from having his head depressed and eyes lowered, to neglect the proper swing, thereby rocking the boat. Again, the neck is as liable to become cramped and stiff, by having the head in this position, as in the one above spoken of. By keeping the head well up, and the back straight, but not stiff, there is no loss of wind, and all the strength expended is on the oar. Keeping one shoulder elevated above the other, makes uneven and tiresome work. Catching the water with unstraightened arms, has slackened tension as its consequence; thus time may be kept, but not stroke, keeping stroke always implying uniformity of work.

The blade should be covered, up to the shoulder, and the manner of dipping the oar should be carefully watched by the instructor or coxswain, as in attempting to avoid one extreme there is likelihood of rushing into the other; that is to say, that in making sure that they cover the blade, many pullers immerse the shank. Doubling forward, and bending over the oar at the feather, bringing the body up to the handle, and not the handle up to the body—in other words, meeting the oar, is a mistake (?) very common to lazy pullers or shirkers, and only requires detection to secure correction. Keeping both the wrists convex, is also a serious mistake, as the outside wrist should invariably be flat to ensure a fair "take." Care should be taken not ot

strike the water at an obtuse angle—rowing the first part in the air. The feather should not be commenced too soon and then shivered, by bringing the blade into a plane with the water, while there is yet time for work; thus the oar might leave the water in perfect time, and yet not keep stroke. This has been designated as one of the most subtle tricks in rowing, and is one of the principal ones involved in the science of shirking.

Turning the elbows at the feather, instead of bringing them sharp past the flanks, is another mistake, which is generally unintentional, and makes heavy work of it for the puller.

Slackening the arms prematurely, and cutting short the end of the stroke, is perhaps not so common as some of the other faults mentioned, and yet a sharp eye should be kept to see that they do not fall into this style of pulling.

Another very annoying thing in pulling, is to see a man throwing water instead of turning it well aft off the lower angle of the blade.

A wave caused in this way is extremely annoying to the oar next aft; there should be no wash or wave of any description traveling astern, but an eddy containing two circling swirls.

These, it is to be recollected, are faults to be often found in men who have pulled for years, on their "own hook," and flatter themselves that they are veterans at the oar. So they may be, in one sense, but it will require a deal of attention on the part of the instructor, to make a perfect oarsman out of one who has pulled entirely after his own notions, without any one to guide him in his work.

However, if a man really has the "stuff" in him to be-

come a good puller, he will amply repay the little care that will be necessary to correct the faults in his style.

THE COXSWAIN.

When a crew are about to take to their boat for practice, the Coxswain, or stroke, as the case may be, will hold the after part of the boat, while the bow oar holds the bow. The men then take their places in regular order, on the call of the Captain, and when all is ready, the Captain orders two men to shove off; which being done, the crew lay on their oars, while the Captain repeats the orders which he is going to give, and the manner of executing them.

The men being warned by an order, bend forward to take, and at the word, all give way together; the stroke oar setting the stroke, and all the bodies, and all the men, swinging fore and aft together, the Coxswain, if there be one, remaining in a perfectly erect posture, without bobbing or bending bis body with the crew, as is often done by inexperienced steersmen.

Although there may not have been too much said upon the subject of a crew pulling together, there has certainly been too little said about the Coxswain's work, and the manner in which it is usually performed.

We are rapidly approaching the time when Coxswains will be unknown in American races, other than barge races, and then, indeed, the "best crew" may win, which is not by any means, always the case, in the present system. It is but poor satisfaction to see a well built, well trained crew "sent off" on a course with good cause to hope for success, pulling as well as men ever pulled, and then have some

miserable baulk on the part of the coxswain destroy every chance of success.

And yet any person who has ever witnessed many races, is no stranger to such a sight. It is therefore important that until such time as coxswains shall be entirely abolished, there should be some rules laid down for their guidance, which may tend to assist them, to some extent, however slight.

In a race, the coxswain has everything in his own hands, and if he is either incompetent, from want of experience in steering a boat, or is timid and uncertain in his line of procedure, the most disastrous consequences are likely to result. The latter characteristic in the coxswain of an American boat, in a late international contest, turned what might have been a glorious victory, into a glorious defeat; and should serve as an example for the future, to all crews who intend entrusting their fortunes to the hands of a coxswain. He should have a "clear eye and a steady hand," as the two indispensable requisites which go to make up a good coxswain; as oftentimes the course is made considerably longer than it need be, by certain nervous pulls at the rudder strings, which coxswains, in the heat and excitement of a race, are very apt to give, in the absence of any other means by which to "help along" (?) the boat.

He should also be as light as possible, as the dead-weight in the boat should be reduced to the fewest possible pounds. This, however, should, as a matter of course, be a secondary consideration to procuring a person with good judgment and experience, for, although some of the champion professional crews in England have employed boys of tender years, for coxswains, in some of their most important

and sharply contested races, there cannot be a doubt but that more way was lost to the crew, by the attention which the stroke oar was obliged to give to the course of the boat, than would have offset a few pounds more avordupois, accompanied by a few additional years, placed in the coxswain's seat. On the other hand, a person's age is not always a gauge to his endowment of brains, and very many men of mature years, have acted in a manner more ridiculous than infant coxswains ever did.

The coxswain should sit square in the centre of his seat, perfectly erect, so as to be able to observe the manner in which his men do their work, as also that he may keep a good lookout ahead, and steer a straight course.

The yoke-lines should be drawn perfectly tight, and wound once around his hands, so that the slightest pull on either one will change the course of the boat in the desired direction.

The mistaken mode of having a slack line generally causes a much stronger pull to be made than is required, which will then require a counter pull on the other side, and so there is often a continual jerking of the lines which makes hard work for the pullers. His body should be perfectly erect, but in an easy position. He should get what purchase he can on the stretcher of the stroke, and pay a good deal of attention to keeping from rocking the boat himself, which coxswains very often do, without being corrected for it.

In regard to the swinging of the coxswain's body, it may be well to allude here to the fashion of bending the body so far forward as that the nose almost knocks against the

bottom of the boat, that is occasionally to be witnessed in inexperienced coxswains, which action many of them accompany with deafening yells to their men for more work.

I have seen coxswains, when the word to "Go" was given, commence throwing their bodies towards the bottom of the boat, as if endeavoring to beat their brains out, at the same time yelling like Choctaws, in the most senseless manner. This is not only the most ridiculous and senseless style of steering that can be imagined, but it is also the most suicidal policy that a coxswain can pursue. He will, inevitably, steer a crooked course, besides rocking the boat from side to side, at every "revolution."

In making short turns, if the men pulling the outside oars are stronger than those pulling the inside, they may be called upon for an extra exertion, but if they happen to be the lighter or weaker half of the crew, and are liable afterwards to be overdone, it is better to ease the other side. Either of these means is better than to make liberal use of the rudder, which impedes the progress of the boat, at the same time that the men are doing their utmost; and it will be found in practice that a boat will round a stake or point of any kind, in less time by easing one side than by steering round with full force on, whilst at the same time, the strength of the men is husbanded

If the crew pull in a river with a current, the coxswain should study the course so as to take advantage of slack water, if going against, or the full current if going with it; and this he must do according to his position in the race, which will be constantly varying in different contests and localities.

He should never attempt to steer a boat in a race without having previously gone over the course a number of times, to familiarize himself with every object. The duties of the coxswain are arduous, and such as require him in the first place to be naturally sharp, and afterwards to cultivate his "smartness" to its farthest extent.

The relations of coxswain and crew are not the same in all clubs nor localities, but unless he is a very young one, he should generally have the control of the crew; and it is his duty to correct a puller, whenever he makes a mistake in his work, or shows a disposition to "soldier."

WITHOUT COXSWAIN.

Crews pulling without coxswains have duties to perform of a somewhat different nature from those who carry a man to do their steering; and, although they have more labor to perform, they are freed from the incumberance of a "worse than useless coxswain."

It was a grand step forward, when an American crew first resolved to "paddle their own canoe," and leave coxswains to those who were unable to do without them. It was a glorious triumph when an American crew crossed the briny deep and launched their craft upon the bosom of the Seine, resolved to demonstrate the practicability of their system. It was a triumph over the sneers and jibes of English boating men, who were jubilant over the prospect of defeating them before the world, and thus to rebuke the audacity that had prompted them to abolish as worse than use-

less" what they contended, and still "do" contend, is an indispensable requisite to a well pulled race.

But the practice they had taken warranted them in going the distance they did, and the cheerfulness and confidence they maintained from first to last, was fully proved in the race to have good foundation.

Their sarcastic laughter as they pulled up the home stretch, must have sounded like a death knell to the haughty and obstinate oarsmen, upon whom the tables were now turned, and who, instead of "rebuking" the Americans, were themselves reminded that others besides Englishmen may understand something of the art of rowing.

Although coxswains had been dispensed with, by many crews, for a considerable time, prior to the Paris Regatta, they were still made use of in many cases of clubs, which, though they conceded the steering with a "traveler" to be the more scientific mode of the the two, were yet undecided as to the expediency of adopting it in their own case; fearful that too great an amount of practice would be required to enable them to pull a creditable or successful race.

One by one, however, the first clubs in the country abolished the steersman; and the international contest, in 1869, between Harvard and Oxford, created so much discussion upon this point, and brought out so many facts favorable to the American system, that they were more strongly impressed than ever with the advantages of having their boats constructed to carry the crew only.

The result is, that over three-fourths of the racing boats now being built are coxswainless, and we venture the assertion that, by two years from the present time, there

will not be a single racing shell built for American waters to carry a coxswain. In regard to a race in which all other things are equal, and one crew carries a coxswain, and in the other the bow oarsman steers, "the result," says Com. Benj. F. Brady, "depends upon what kind of coxswain one crew has, and what kind of a bow-oarsman the other."

This is the whole thing in a nutshell, and should be taken into consideration, by those who imagine that the mere fact of a crew not carrying a coxswain will ensure them victory over another which employs one.

What Americans claim is, that a bow-oarsman can, with sufficient practice, and there are scores who have it, do his work at the oar and steer the boat as well.

This is denied by most Englishmen, who assert the impossibility of a man's "doing two things at one time," as a sufficient reason for understanding why one man cannot fill the two offices, of oarsman and steerer, while they are afraid to test their system with the American, by entering one of their boats with a "worse than useless" against an American boat steered by the bow oar.

However, they will ultimately be obliged to adopt this system, as, although many of their oarsmen are obstinate and determined to frown down foreign "innovations," there are many others who are liberal-minded men, disposed to look favorably on anything likely to advance the cause.

The coxswainless boats are to be seen upon almost every boating course in America, and are doubtless familiar sights to every reader of this book. The bow-oarsman has his feet placed against a cross-piece in the bottom of the boat, to which are attached, one on each side, two wire

lines, reaching aft through small "eyes" to the rudder, making a miniature "walking-beam" in the boat. By a slight pressure upon either side, the course of the boat is materially changed, and any one can see, at a glance, that great practice is required to enable a man to sit looking astern and pulling in time, and as well as the others, to steer the boat on a straight course.

He should always, before starting on a pull, look well at the course, and then, after taking some object astern as a guide, endeavor to keep the boat in a straight line. The stroke oar will regulate the speed of the boat and, when necessary, call upon his men for "a little more cider."

In using the button oars, now so common, the button of the oar should be kept just inside the thowle, the outside hand should take hold with the thumb up, while the inside grasps the loom just where the rounded off part joins the square, with the thumb underneath the oar. Let those who enter a boat of this kind, for the first time, not be discouraged at the difficulties which beset them, but keep up courage, and remember that "practice makes perfect."

SCULLING.

When a man pulls two oars, he is said to be pulling a pair of sculls, and when boats are constructed for one or two men each to pull a pair of oars, they are said to be either single or double scull boats, as the case may be.

The manner of rowing with sculls is considerably different from that of rowing with an oar; as in the first instance two paddles, one in each hand, are made use of, while, in the

latter, all the attention is paid to one oar, and all the strength expended on it.

It certainly requires as much practice, if not more, to become a good sculler than to be a good rower, as the work has got to be done with the utmost uniformity.

In the remarks under the head of "Initiative," something has been said in regard to persons desiring to enter a crew, practicing at the beginning, in a large boat; and some limited instructions are there laid down for the manner of pulling. It may be well to repeat the advice there given as to the necessity of first practicing in a large, stiff boat, before attempting to pull in an outrigger. The place of the rower is directly in the centre of the thwart.

He should sit perfectly straight, but not have his back stiff; his feet placed firmly against the stretcher, and the knees elevated so as that the hands will just miss them. He should grasp the handles of the sculls firmly with thumbs underneath, and with arms perfectly straight, reach forward as far as his toes, and take the water with a "square" blade—both oars dipping simultaneously—and when the oars are even with the boat, give almost a jerk, as the power is applied, and throw the whole weight of the body upon the oar, at the same time, in order to gain greater force, jam the feet against the stretcher, but do not rise from the seat.

When the stroke is completed, the oars should be feathered at a medium height, by dropping the wrists, and a new stroke commenced. In sculling, as in rowing, there is a great diversity of opinion in regard to the style of stroke that should be pulled; but to try and set an infallible rule upon this point by which to be guided at all times and places, is

too ridiculous to merit attention; and yet, one will often hear, perhaps, just after a race between two crews, one of which pulled a long, sweeping stroke, (so called) the other a short jerking stroke, (so called,) such remarks as the following from some, who, of course, understood all about it: "Their short stroke killed them."

Such superlatively nonsensical remarks as the above, are oftentimes made by men calling themselves oarsmen, and who pretend to know something about boating. The folly of such assertions was never better illustrated than in a cable dispatch two years ago announcing the result of the interuniversity boat race, to which was added several gratuitous remarks upon the manner in which the race was pulled; in one of these it was said that the similarity of Harvard's style to that of Cambridge was wonderful, and that it was the same form pulled by Harvard that lost Cambridge the race for the past ten years. And yet the announcement of last years contest (1870) shows that the form of Cambridge has placed her crew in front of Oxford.

The "correct" stroke for a sculler to pull is the one that he can pull the best, that is, it is the one best suited in every way to his size and form. If he is a man with long arms and legs, he will certainly find that he will make better time with less fatigue, by pulling a long stroke than a short one, where as, if he be a short man with short arms and legs, he will pull a short stroke with much greater ease than a long one.

The stroke by which a man can make the best time with the least fatigue is the one he had better pull; and not pull a long one because Tom pulls a long one, nor a short one because Dick pulls a short one.

There is considerable knack in pulling a pair of sculls and keeping a straight course, and this knack has got to be found out before any attempt is made at pulling in a race. It consists in learning by practice to put an equal amount of power on each oar, which, if the boat is a good one, will be about all that will be necessary to keep a straight course.

SELECTING A CREW.

The task of selecting the men for a crew involves the necessity of a pretty thorough acquaintance with some "ology" or "ognomy," or, at any rate, with humanity in its different shapes and forms. This task, if it is to be entrusted to one person, should be to some one who is not likely to be deceived by a "mountain of flesh" into the notion that he has caught a young Hercules; nor, on the other hand, that because a man is all skin and bone, and looks a little spare, that he must be rejected as good for nothing.

A man should be stripped, in order to be thoroughly examined, as clothes often make considerable difference in the appearance of men. The legs play as important an office in the act of rowing, as any other part of the of the frame, and it is important that the thighs should be examined, in order to be sure that they will be able to supply their full share of muscular force. The arms should be muscular, with long wrists, straight elbows, powerful and pliable shoulders, and more essential than all, a strong muscular loin. Without strong loins, all the muscular strength of the

arms would count for nothing; because, if the loins are weak, there will be an inability to draw the oar towards the body, and as a natural consequence, the body goes forward and meets the oar, and presents that beautiful and encouraging (?) spectacle of a man "meeting" his oar.

It is almost impossible to determine what amount of strength any form, or any limb, is capable of putting forth without a trial, and of all portions of the frame the back and loins are the least likely to afford much information by a digital examination. It can seldom or never be affirmed with accuracy, from merely looking at a man, that he will make a good oarsman; but it can often be stated and with every degree of truth from simple observation, that certain men will "not" make good men in a boat.

A tall, somewhat slouchy or clumsy, high shouldered man will generally be gobbled for a crew, if the trainer or captain claps his peepers on him. In examining the thighs, a man should have them well developed without being loaded with superfluous flesh, as it would be a more promising sign by considerable, to find them somewhat spare, as compared to the rest of the body, than too heavy.

The Lungs and Heart should be pretty thoroughly examined; and this although not so set down, should be the first ground to be looked at, as unless they are in good, healthy condition, it would be useless to attempt to do anything with the candidate; for, although many men of weak lungs or heart have comparatively great muscular strength, they must inevitably, fall short, if required to pull a considerable distance. The most decisive manner of determining the condition of the respiratory organs is by a reasonable trial of them,

but all this has been more elaborately treated of under the head of Professional Training.

There is only a certain amount of strength that can be made available in the present style of boats, and the attributes necessary to make a successful puller in one of these boats, are strength, muscle, nerve and elasticity; and any additional weight, after these are secured, will be so much dead-wood, as in the present style of boat, every additional pound weight buries the boat so much more.

TRIMMING A BOAT, ETC.

The science of balancing involves a great many principles, at present comprehended only by a few, whose business does not require them to understand all the wonders of nature and art. The men should be so placed as to keep the boat on her bottom, without any oscillating motion. When it is found necessary to trim a boat by the bow or stern, it may be accepted as a foregone conclusion, that if that boat comes in first, it will be "in spite of fate."

This is seldom or never the case in the shells now in use, as in a majority of cases, the weight and position of every man in the boat is previously furnished to the builder, and there is no guess work about it.

In assigning positions to the crew the heaviest men should be placed at the midship oars. The lightest man should be at the bow-oar.

RACE DAY.

The morning walk, or run, should be taken, as usual, on

the day of the race. and a light breakfast should also be taken. After breakfast, no more exercise until one hour before dinner, when a thirty-minutes' walk should be taken, in some shaded park or secluded spot of any kind.

The dinner should be somewhat lighter than usual, and should consist of either roast beef or mutton, with light biscuit or dry toast ; a good drink of cool coffee, tea, or milk. It is sometimes the habit of a crew who have abstained from the use of liquor, all through their course of training, to take a glass of liquor of some kind, generally egged sherry, just previous to entering the boat ; but this course is certainly open to condemnation, as trainers who make use of liquor all the time in training a crew, admit that it is not given with a view of producing any beneficial effect. They say that it undoubtedly gives "power," which, in this country, would probably be called "Dutch courage"—but that, in very many cases, it injures the wind, and, in delicate stomachs, often produces nausea.

I should, unconditionally advise a crew to make use of no spirituous liquors, as a drink, from first to last—from their first preparation to the completion of the race.

A few minutes before entering the boat, the crew should be stripped, and their entire bodies, particularly the muscles of the arms, back, and shoulders, rubbed well with the hands, after which the entire body should be washed in pure alcohol, which should be rubbed over the body with the hands (of a second person) until perfectly dry. The racing suit may then be donned, and a cloak or coat of some kind made use of to protect the body from draughts of air. A short time before the racing hour, the crew should take their places in

the boat; and after making sure that everything is in working order, pull leisurely up to the starting point, or if there is sufficient spare time, and there should be, they should make several brisk spurts, in order to get "waked up" and ready for the contest.

When the boats are called and lined, the crew should be cool, confident and collected. Nothing, at this time, will go farther toward crowning the efforts of the crew with success, than confidence in themselves; as, if they are excited and nervous, they will be almost sure to make a bad start, and perhaps lose considerable ground.

The whole attention should be centered upon the work in hand, and no thought of the crowd or the consequences of defeat, should be allowed to draw the mind off from the task now to be undertaken.

When all is in readiness, and the crew is waiting for the word, they should reach forward and prepare to "take." Care should be had that the oar descends into the water in the proper manner, and that a good "hold" is had of the water, in order that the lead may not be lost.

The stroke oar will have to judge of the amount of exertion that had best be expended to gain the lead, as, where great effort is made to obtain the lead, it sometimes causes, in the minds of those who have not pulled before in a race, an impression that the crew are already at the point of desperation.

The crew should manage to keep clear of all competitors, in more ways than one, or at least to keep their own water, and draw near the stake by describing a long curve, or quarter circle, in order that this backing-water may be

obviated, as nothing is worse for a boat's chances than to have it come square up to the stake, and then have to back and pull, in order to get around it.

If the crews are anywhere near equally matched, the one having the lead at the turn, will, barring accidents, be pretty sure to come in ahead. At the close of the race, dry clothes should be put on, and if fatigue is experienced, a glass of sherry and water ought to be taken.

KEEPING STROKE.

This consists in the crew imitating the exact stroke set by the stroke oar; by pulling exactly as long, and dipping as deep.

It is in not being able to keep stroke that the shirker or "incompetent" is detected. He may keep almost, or quite perfect time, but stroke cannot be kept without doing honest work.

Although the loss of stroke is not as unpleasant to hear as the loss of time, it is certainly as fatal to the progress of the boat, or rather more so; because the variable ending of the stroke is of more consequence than the want of time in beginning it, or rather in feathering, which is the process by which time is marked,

The speed of the boat depends upon the men swinging and "pulling" at the same moment, to nearly the same degree and in the same direction.

This pulling as one man, is the only means by which a crew can hope to win, as a light crew pulling in concert, will invariably defeat a stronger and heavier one pulling an imperfect stroke.

BACKING WATER.

Backing water, or "stern all," as it is sometimes designated, is effected by the oar being held in the same position as in the "hold water" and pushed—in the opposite direction to that of rowing—through the water and pulled through the air.

At leaving the water, the blade should be well feathered, care being taken not to dip too deep; to return in time, and to maintain the same length of stroke. All the work should be done aft the thwart, without attempting to lean back past the perpendicular.

This maneuver is a very pretty one, and is made use of only in preparatory action or reviews.

KEEPING TIME.

This consists in the whole crew's feathering and recovering simultaneously; and it has been said that it may be carried out to a tolerably full extent by a crew, some of whom are accomplished shirkers, while the others are "honest." That this is the case, scarcely any oarsman will care to deny, and a great many certainly cannot.

RESTING.

Resting or "easing,' as it is called in England, is a stop made by the whole crew exactly at the same time, at the word of the captain, when the oars should not be wholly recovered from the feather, but allowed to remain half way be-

tween the horizontal and the perpendicular, and at right angles to the boat, so that as soon as the way is a little off, they may lie flat on the water and thus prevent any rocking for want of a perfect balance.

Under the head of Amateur Training, it has been advised that practicing crews should take occasional momentary rests, for the purpose of refreshing the men and correcting any faults that may have been committed.

This course will be found to work advantageously if tried, for many reasons known to every person who has ever pulled in a boat, and therefore not necessary to repeat here.

HOLDING WATER.

This is an expedient made use of to stop the boat suddenly. It is accomplished by all the crew, at the command of the coxswain, or captain, dropping the blades of their oars into the water. The rate of speed at which the boat is going should regulate the distance that the blade is dropped into the water; the arms being held straight, while the inside hand is placed firmly upon the loom, to guard against a crab which is pretty sure to be made, unless the arms are straight. In the shell boats, this is a very difficult maneuver to execute, while they are under good speed, and, fortunately, not very necessary, unless where some object is suddenly encountered, which it is impossible otherwise to avoid, or in racing, where the crew adopt this means of turning the stake. Where a crew calculate to turn a stake in a race in this manner, they should practice a great

deal at first, and a boat has often been assisted round the stake by the stroke oar taking hold of the buoy or boat, with his hand although this is generally against the rule.

TURNING A STAKE.

Different ideas are entertained among different oarsmen and captains of crews in regard to the best manner of turning a stake, but a few trials will usually show the way in which the best time can be made.

To be sure, the great object of a crew is to be, if possible, first at the stake, and to most people, the shortest way of reaching the stake would seem to be by keeping the boat in a direct line from the starting point.

Although this plan is followed by a great many first class crews, it is not the proper way of doing it, as the boats' progress is checked to a wonderful extent by this manner of turning.

The proper way for a steersman to do, is to make his boat describe a quarter circle from the home to the out stake. He should attain the outside of this curve gradually, by letting the inside oars pull a little stronger than the outside. It will be necessary to use the rudder but a very little.

A special advantage of this manner of turning the stake is, that the heavy work is more nearly equalized than in the other. In this way the inside oars have to do a little the heaviest pulling from the home to the out-stake, but in turning, the outside oars will have considerably the hardest work. If the boat rounds the stake on the proper curve, and the starboard and port oars each do their work properly, the rudder need not be used at all. In taking a direct line from the

home to the out, and then "backing and pulling" around, the boat comes to a dead stop, and is fairly dragged around by the outside oars. In the way advised, of describing a quarter circle, although it seems like losing ground, it is really a considerable gain, and if executed properly, the boat will go round on the jump.

THE SLIDE STROKE.

The many improvements that are constantly being made, in the manner of constructing boats, and the method of rowing, is sufficient proof that the devotees of the art are increasing in number. The latest change was brought about by the introduction of a new seat, crossing the thwart and running fore and aft—parallel with the boat. This seat is polished perfectly smooth, and upon it the rower slides. The board is about sixteen inches in length, and wide enough for comfort, and should be well coated with grease, in order to insure a rapid slide. It will be necessary to have a pair of pantaloons especially for this work, and these should not be of the skimpy measurement now in style, as an easy and effective movement of the limbs would be impossible in them. They should be constructed on a sufficiently roomy scale to allow free play to the legs, and ought not to be of very heavy material. A piece of chamois or buckskin should be fastened on the INSIDE of the pantaloons on that portion most actively engaged in the work, forming a second seat. The difficulty of acquiring this stroke is not nearly so great as may at first appear, and by a little prac-

tice, a crew that is reasonably proficient will thoroughly master it.

THE SLIDING SEAT

Is yet another change, lately introduced, and differs from the former in that the seat slides with the rower, instead of the rower sliding on the seat. A great many prefer this to the slide stroke, and "vice versa." It is probable that these two methods will be generally adopted, but the grand question of TIME is the one by which they must establish their claims to superiority over the stationary seat and stroke.

It has not yet been proved that any better time can be made with these improvements than with the old style, and unless there is a great saving of labor or exertion, they do not possess any advantages, and if the strength or power saved cannot be utilized, there is no particular benefit gained by saving it.

If a crew can pull a boat constructed with stationary seats, and pulling the "pendulum" stroke, and make as good time—though they do come home blown—as one with either of these improvements, though the latter may not be so tired, I cannot discover their rightful claim to superiority, as a "blown" crew will recover their wind in almost no time, and if necessary, be ready for a fresh pull, as has often been proved.

DIAGRAM OF A RACING COURSE.

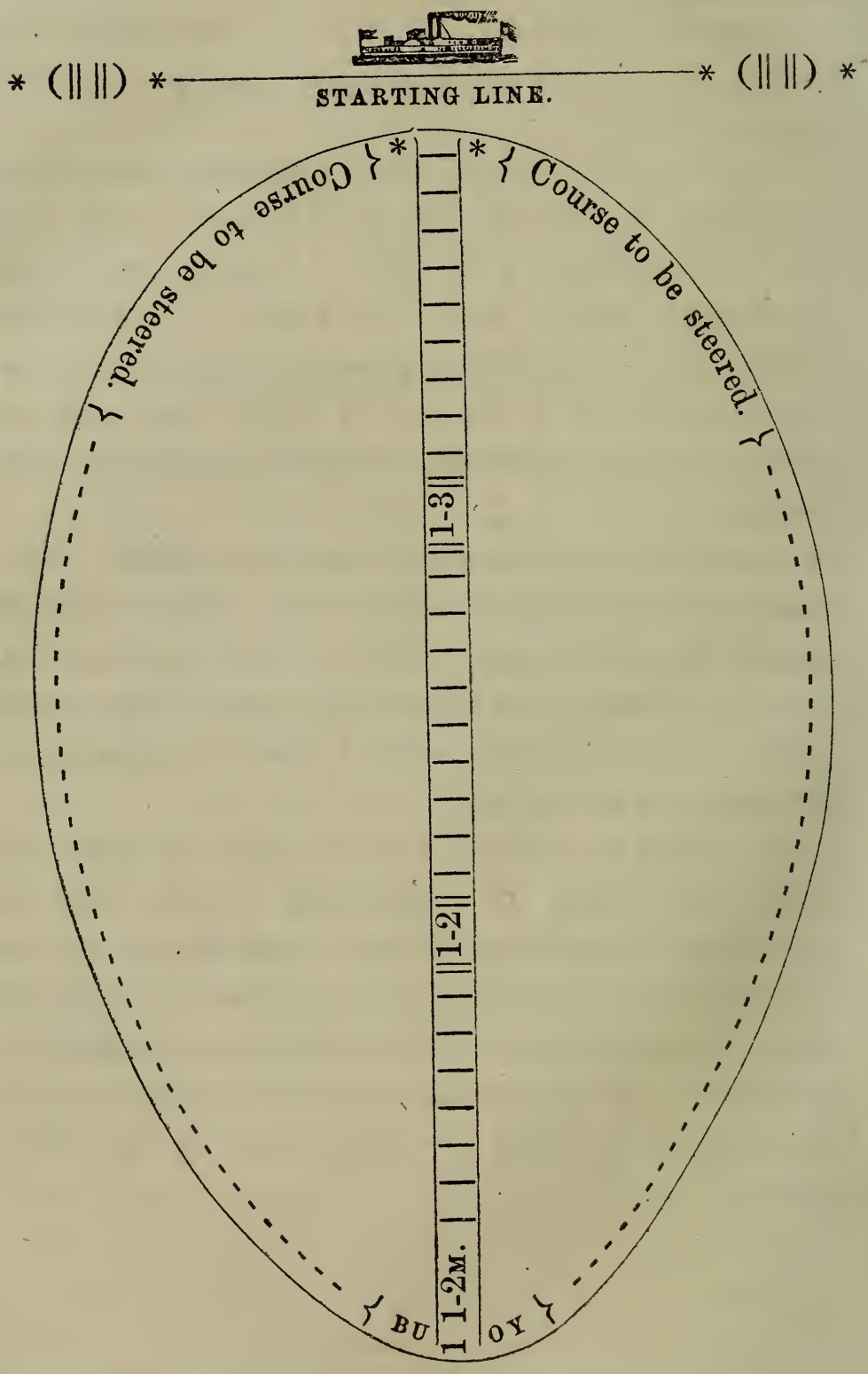

DIAGRAM OF A DOUBLE COURSE.

TO PREVENT FOULING.

STARTING LINE.

Course to be steered.

Course to be steered.

1-3

1-2

1 1-2m.

BUOY.

BUOY.

OUT-STAKE.

1 1-2 MILES.

Contributions

ON

ROWING AND TRAINING,

BY

William Blaikie, Benj. F. Brady,
Joshua Ward, Robt. Fulton,
C. P. Kunhardt, Stephen Roberts,
Geo. R. Wright, A. McC. Duncan,
R. E. Clemens.

HARVARD TRAINING.

BY

WILLIAM BLAIKIE.

Previous to 1866, the stringent rules of the Prize Ring, on training, seem to have been almost literally followed; liquids and vegetables being used very sparingly, while roast and broiled beef and roast mutton, with dry bread, were the main and, indeed, almost sole nourishment of the man in training.

Feverish blood and disposition, together often with an "all-gone" feeling at the stomach, and a lean, hungry look, were the usual characteristic symptoms and appearance of the man so treated.

I have known one trained in this manner, unable to sleep and forced to get up at midnight and bathe his head and neck to allay the fever; another to pursue this course so far that on the day of the race, his physician prescribed his bed instead of his boat, he being regularly attacked by a fever.

And I have seen very many become so tired of their food, taken, perhaps, in the fiercest heat of summer, as to perfectly loath it.

But since that time the Harvard University crews have had a fuller and more reasonable bill of fare. Potatoes and rice

may be seen as regularly on the table as beef itself, and the vegetables of the season are allowed in moderate quantities. Broiled steak or chops, potatoes in almost any style, without grease, bread nearly fresh, tea if desired, water, or often milk if prefered, oatmeal porridge or gruel, and eggs poached or boiled—not very hard—now render the breakfast of a Harvard student in training, palatable and even attractive; it is doubtful if a well cooked fresh fish, occasionally ought not to find its place on the table.

The best roast beef or mutton procurable, potatoes, bread, cracked wheat, rice, oatmeal gruel, and the various vegtables in the market, often, if not regularly, make the dinner inviting; and a piece of salmon or a dish of poultry or game is an occasional visitor, aiding to vary yet more the programme. Tapioca, farina and other vegetable puddings make an admirable substitute for heavy puddings as a desert. Milk, water, and tea again, and also butter and salt, in reasonable quantities, are permitted.

Bread and milk, or tea, butter, oatmeal gruel, dry toast and crackers, are the chief and often only articles taken at supper. Such was the bill of fare at the Harvard table in 1866, and it is not probable that it has changed materially since that time.

It has sent the crew to the score, more likely to perspire freely and some pounds heavier in weight, than the old system, as well as being in better spirits and more fit to pull a tough, hard race. A prize fighter needs a very thin cheek, so that a blow on it will not close his eye, but an oarsman does not, and as an instance, the Oxford crew even showed a double chin on the day of their race with Harvard. The best mower in haying time is not usually the leanest, and

generally eats and drinks his fill of what he likes best.

BOAT EXERCISE.

About a half hours' careful rowing at a tolerable pace, with an occasional stop or "easy," for instruction and rest, seems about sufficient for a morning.

In the afternoon, nearly or quite an hours' rowing, with not more than two or three rests will complete the days water work.

The rate of speed in the afternoon should go up from thirty-five strokes a minute when commencing training, to racing gait during the last two weeks, and pulling over the proposed course once "on time," will be plenty of work for this last period.

COACHING.

Every stroke taken at any time should be taken "with care," and no slouchy rowing ought to be allowed in the boat.

In order to detect any neglect of duty, as well as for the general purposes of a "coach," the bow oarsman has heretofore attended to the drilling of his men. But this gives him three duties, viz: His own pulling, steering the boat, and watching and correcting the men, and, certainly, the first two of these will keep any ordinary man sufficiently busy. A much better plan would seem to be to have some judicious "coach" or instructor in whom the crew can place confidence accompany them in a conveyance in which he can

keep alongside, or nearly so, and devote his entire attention to detecting and remedying their faults.

This last he should do promptly and fearlessly, and he will find that he can tell, to a nicety who is inclined, intentionally or otherwise, to shirk, and who are the staying ones. He can tell, too, whether they need more or less work, and guide himself accordingly.

LAND EXERCISE.

A three or four-mile walk, at a four-mile gait, starting, say, an hour after breakfast, will not, unless in extremely hot weather, prove too much for a vigorous young man, with ordinarily good legs. The speed of this walk should be reached gradually, and after, perhaps, if a man in the start is much out of condition, say two weeks slower going.

A thorough rubbing of the entire body, until the skin is absolutely red, should "immediately" follow each row, and then a dry suit should be donned. Flannel is the best material for it.

SLEEP.

Eight hours should seem a good medium. If a man feels all right with a less amount than this, he should regulate his own hours; but if he is nervous and excitable, he should have more. He should never lie abed awake in the morning, but spring up at once, and take his sponge bath, or in warm weather, if convenient, a plunge into cold water.

After each row, the Harvard men have, while hot and

perspiring, taken a dip into the river and a few strokes, and this plan, which would seem more agreeable than prudent, is not reported to have worked injury.

NUMBER OF STROKES.

Without a Coxswain, the Harvard men have gone fastest, on an average of forty-four or forty-five strokes a minute, through a three-mile race. With coxswain, forty or forty-one seems about equivalent.

ROWING AND TRAINING,

BY JOSHUA WARD, CAPTAIN OF WARD CREW, EX-CHAMPION OF AMERICA.

First, be sure that the men are in perfect health, so that they will be able to stand the work which they are about to commence.

A mild medicine is usually required to cleanse the blood, as, unless the blood is in good order, and in very many cases it is in any other condition than a good one, the food taken will

not digest well. After the men are in good condition they should have plenty of rowing and walking, first, short distances to be gradually increased to what will be their "card."

The following is about the course of training I should advise. Upon getting up in the morning take a sponge bath, dry well with a coarse towel, after which walk about two miles before breakfast.

Breakfast should consist of a good tender porterhouse steak, broiled rare, which should be thoroughly masticated before swallowing. As a drink, a cup of black tea. Drink no more than absolutely necessary either at meals or any other time.

After breakfast, which should be eaten slowly, no exercise should be taken for about an hour; at the expiration of which time, the crew can get in the boat and row the same distance expected to be rowed in the race, and at a good pace.

After returning from the row, take a rub down with a dry towel, and then a moderate walk, until shortly before dinner time. Dinner should consist of roast beef or broiled chicken, with soft boiled eggs, etc.

If any drink is taken, tea or water, in moderate quantity, should be used. After dinner, no exercise for about two hours, when the crew take the afternoon pull, which should be over about the same distance and at the same pace as that of the morning.

After coming ashore, rub down as in the morning, with a coarse towel, and then take a moderate walk, returning home about an hour before supper, which, when eaten at all should be a light one, composed of a little broiled meat with a piece of dry toast and a cup of tea.

Two meals, at the least, should always be taken; and where only two are taken, they should, in all cases, be what are known as breakfast and dinner, as both these meals, or rather either of them, are more essential to the man in training than supper, particularly if he, as I would advise him to do, rises with the sun and retires at about 9 o'clock, or half-past, in the evening.

After a night's sleep, and after having left the bed at five in the morning and walked or ran two, three, or four miles, as well as taking a bath, the system is generally quite importunate for sustenance by 7 o'clock or half-past.

This is not always the case, however, in regard to supper; as, after having eaten a hearty dinner, at 1 o'clock, without any other exercise thereafter than the afternoon row, a man with very little practice can accustom himself to doing without more food until the following morning, if he retire at about nine o'clock.

Up with the sun in the morning and pursue the regular plan of bath, walk etc., unless stormy, in which case exercise indoors should be substituted for the walk.

The dumbells and clubs are proper implements to use for this purpose, and every man in training, whether amateur or professional, should have one or other, or both.

The man in training should always have plenty of exercise given him at regular and proper intervals. By plenty of exercise I mean just enough neither too much nor too little; and to be able to tell just when a man has just enough belongs only to those who have had an extensive experience in preparing men for aquatic or other contests.

His habits must, of necessity, be very regular, otherwise the course which he is pursuing will result in very little good.

In regard to the oars which myself and brothers—the Ward Crew—generally use ; they are sweeps, about twelve feet long and five inches wide. A boat for our crew of four would be forty-six feet long, and twenty inches wide. In pulling, we use the legs, and in a four or six-oared boat pull forty and forty-two strokes per minute· In pulling a pair of sculls, I pull about thity-eight strokes to the minute, and use the legs.

We used spoon oars, and our boats were constructed with the stroke on the starboard side.

In sculling, I have always pulled open handed, but I think cross handed is the better style.

To make a succesful rower great practice will be required, although in this, as in everything else, some learn much more rapidly than others. Myself and brothers were brought up near the Hudson, and have worked for many years upon the river. It was from having in early life to row as a business or means of livelihood, that we cultivated a taste, so to speak, for rowing, and also became good pullers.

I have here upon the Hudson a fine place for rowing, and will be happy to undertake the care and training of any party or parties who may so far honor me as to entrust themselves to my care.

Rowing has no equal among the recreative arts either in modern or ancient times.

POINTS ON ROWING AND TRAINING,

BY STEPHEN ROBERTS, EX-CHAMPION SCULLER OF AMERICA.

It may not be altogether out of place for one who was at one time the champion sculler of the United States; who has been for many years actively connected with the history of boat-racing and boat-building, to endeavor to add a few points to this valuable and interesting work upon Rowing and Training.

ABOUT RACING.

When a race is to take place there should be at least four judges and a referee appointed by the mutual agreement of the parties.

The business of the referee should be to start the boats which should be backed up to a line before starting.

If, after the boats are started, the referee thinks the start an unfair one, he has, in my opinion, the right to call both boats back for a new start.

If all parties distinctly hear the recall and one or more

refuse to return, pull over the course, and claim the race, they shall not be entitled to any purse, prize or other stake, that may have been rowed for.

Both boats should make a straight line for the stake boat or buoy, and any boat deviating from such a course and fouling another boat, shall be ruled out of the race or regatta.

No boat has a right to cross the bow of another until she has a clean water lead, or at the least one full length. Unless there are two different stake boats or buoys, both boats should turn the one way.

When two boats are approaching a stake, the boat that has the lead, if by only a single foot, has the inside track and the other boat must either turn outside or wait, until this boat is far enough ahead to preclude the possibility of a foul.

When two boats come together with the oars, it is best that they should free themselves as best they may and continue the race; but if any boat shall, after having been fouled in this manner, continue the contest, and being beaten, come home and claim a foul, they shall have no hearing.

In order to make a legitimate claim of foul, it is necessary that a crew stop rowing immediately when such foul occurs, as a continuation of the race makes it a new one, in fact. In a case of a collision, the crew of either boat should not use their hands to shove off the other boats. A referee's decision is only required when the judges are equally divided, and in that case his decision is final: The referee should be a man posted in a aquatics and not interested in the race.

TRAINING A CREW.

In training a crew for a race, the habits and mode of living of a man are to be consulted more than any set rules. If he is used to eating meat well cooked, it will not do to give him meat cooked rare, as this is apt to produce a looseness in his bowels. A man must eat according to the state of his system, and if he trains hard, eats meat, and is troubled with loose bowels, he should train light and live on toast, bread, and coffee or tea, for a few days, with puddings, or bread and milk; and if he is used to drinking, good fresh ale will not hurt him, but no liquor stronger than porter or ale, should be used. On the other hand, if costiveness is present, no longer than forty-eight hours should be permitted to elapse without a motion, and this should be brought about, if possible, by making use of the suitable food and drink; such, for instance, as the veal steaks cooked rare, with cider or water, as a drink.

The main thing, in training a man or crew, is to give him or them, plenty of the same kind of work performed in the race. Be careful, however, not to put on too much at first. If a mile race is to be pulled, twenty days training will be required.

The first day, row, say one mile; the second and third day, about the same, or a little more, not too hard. After this, increase the distance a half mile every day, until five miles are gone over at each row. Then, if there are no blisters on the hands, row the whole distance at racing pace. Every other day, row eight or ten miles, up to within

twenty-four hours of the race. Less rowing than this should not be taken; more will not hurt.

The time required to get a crew into good shape depends, somewhat, upon the nature of their business; for instance, a crew composed of mechanics will not have to wait for their hands to become toughened, nor need they be afraid of any blisters appearing on their hands, to interfere with their pulling. Clerks, book-keepers, tape-measurers, etc., generally require two weeks' more of training than men who have been always used to heavy lifting; but, when a man once does get into good training, his race becomes an easy matter for him. The writer remembers, when pulling for the Championship of New York, in a ten-mile race with Robert Martin, of Whitehall, that Martin led him for the first five miles, but not having been subjected to a sufficiently severe ordeal in training, he lost steadily from the turn, and came in a considerable distance behind.

During the preparatory training, the writer had rowed over three hundred miles, to get into good condition. On such occasions as stormy mornings and the like, when it was impossible to row, a long walk was taken, or heavy weights were lifted and thrown.

ROWING, RACING AND TRAINING,

AT THE UNITED STATES NAVAL ACADEMY, BY C. P. KUNHARDT.

During the late war, there was little or no time to think of pleasure and recreation at the Academy, and it was not until the year 1865, that there were any regularly organized Boat Clubs there.

Under Admiral Porters' inspiring influence, after the return of the Naval School to Annapolis from Newport, where it had been located for several years, two fine lapstreak outriggers, named respectively, the Essex and the Lizzie, were procured for the use of the Cadets. They were light and handsome craft, thirty-five feet long and twenty-five inches wide amidships; both pulled four oars apiece, and were exact mates, and were presented to the First and Second Classes.

From these two Classes the crews were selected, and it became their duty to undergo a system of training conformable to the regulations of the Academy. Their diet was, of necessity, limited to that of the school at first, but was in time changed so as to approximate, as nearly as possible, to a regular course of training. Their time for practice

was limited by the regulations, in regard to study hours, and both crews had to struggle hard to comply with the requirements of the Academy and those of an oarsman in training.

In spite of these difficulties, however, two excellent crews were produced, displaying an immense amount of muscle and activity.

The first race took place in May, of the year 1867, the Second Class crew carrying off the honors, after a sharply contested race. The course was two miles, with one turn, and the names of the winners were: Drake, (Stroke); Doty, Ingersoll and McLane, (Bow,) with Jasper, as coxswain. The weather was fair, with but slight tide. Time, fourteen minutes.

There is a great disadvantage under which midshipmen labor, and which no amount of practice possible to obtain will counterbalance.

They take an annual cruise, leaving the Academy in June, and not returning again until the end of September, during which time, of necessity, all boating matters are laid aside, as no training or practice can be carried on, and the clubs are virtually disbanded for the time of the cruise.

Upon their return boating is resumed and prosecuted with all vigor, but it is of course difficult to make up for so much lost time, before the cold weather sets in. So that only about four months out of the whole year can be made available at the Academy for boating purposes, and as a consequence, outside clubs have a great advantage in point of practice. Another thing to be considered is the shifting nature of their crews; as one class graduates every year it's place is supplied by new pullers, which was at one time found so de-

trimental to the rowing interests of the Academy, that boats were given to the third and fourth classes, so that at the present time, when a class enters the school, a crew is selected therefrom which has to contend for the aquatic honors of the institute for the succeeding course of four years.

By this means, the crews of the present day have attained to a state of high physical culture, who can, in point of strength and vim, be compared favorably with any crew that is often seen.

A series of Annual Regattas have been established, which are participated in by the members of the different Classes, the crews competing for handsome silk flags and silver badges. The noble sport of Rowing is now permanently established as a part of the course, and being regarded with favor by the authorities, is sure of being faithfully nurtured.

The second important race took place in the spring of 1868, in which the former Second Class, whose names are given above, again carried off the honors, winning the race with ease, in thirteen minutes thirty seconds, over the same course rowed in 1867. From this time forth, more attention than ever was given to the sport, and new and lighter boats were demanded.

A six-oared mahogany shell was ordered from Stephen Roberts, of New York. She was forty-eight feet long by twenty inches beam and was fitted for a coxswain.

The stroke was on the port side. The victorious crew of the Class of 1868, with two new members, formed her compliment, but she did not enter any races until the spring of 1869. By that time, she passed into the hands of the "Decatur" Club, of the Class of 1869, and a crew was put

in training to pull her, in a rather unequal contest, against a new four-oared paper shell, built for the Class of 1870, by Messrs. Waters, Balch & Co., of Troy, New York.

This latter boat was the trial boat of a number of similar ones that were to follow. She is a beautiful specimen of racing craft, pulling four oars, without coxswain, and her model and finish were praised by everybody.

The first race was a severe test of the qualities claimed for her, and she fully sustained them. The names of her crew were: W. M. Wood, (stroke,) Holiday, Hubbard, and Merriman (bow,) and those of her opponent, the six-oared shell; Garvin, (stroke) Osborne, Paine, Bolles, Wright and Stewart, (bow,) with Wilson, as coxswain. The time appointed for the race was May, 1869, and on account of the First Class graduating but a few days after that appointed for the race, it could not be postponed, but was pulled despite the inclemency of the weather. It blew a regular gale, and the usually quiet waters of the Severn were greatly agitated, sending great rollers in from the bay. As the race was sure to come off, an immense crowd lined the shores to witness the struggle for the Championship of the U. S. N. A.

Both boats were prompt in taking their places at the starting buoy, ready for the "Word," which was soon after given by Admiral Porter, who was present in his barge.

The difference between boats and crews soon became apparent, as at the start, the paper shell fairly jumped ahead of the wooden one.

The crew of the latter, however, pulled a steady stroke and being to leeward, and consequently more sheltered than their opponents, had a slight advantage, and steadily gained

until they reached the turn, at which point they were one quarter of a length ahead.

The stake was one and a half miles from the starting point, and here the "Decatur" crew were pulling forty-one strokes to the Nautilus (paper) thirty-nine strokes.

The boats turned without much choice and the home-stretch began; the paper boat drawing steadily ahead, and, at about half way home, had fairly distanced the "six." They had now reached the heavy water, and in a few minutes the "Decatur" swamped; sinking with all hands in her. She had completely filled and broken her back, the crew being obliged to swim for the nearest boats.

The paper shell gained an easy victory, arriving home in twenty-one minutes and sixteen seconds, having fifteen seconds to spare for the two extra oars of their competitors. The race could hardly be termed a perfectly fair one, as in fine weather, there is scarcely a doubt but that the paper boat would distance the wooden one. The second paper shell received from Messrs. Waters, Balch & Co., was a mate to the first one, and belongs to the Class of 1871, the present second class of the Academy.

The race which came off in April last, between the two four-oared boats, was looked forward to with great interest by all hands, for many months previous.

The Nautilus crew pulled the Quaker City Club, of Philadelphia, in May, and achieved a creditable victory.

A six-oared cedar shell was received in April, from Elliot, of Greenpoint. She is forty-nine feet long and eighteen inches wide, and combines the American and English model; the sides towards her bow have considerable "flare out," and are brought up to a vertical position at the stem, by a

very graceful curve or bend. She pulls a starboard stroke, and seems to be a very fast and handsome craft. It is intended soon to procure another six-oared shell; this one to be of paper, as they are very favorably impressed with the merits of this class of boats at the Academy.

The boats at the Academy are, therefore, two four-oared paper shells; two six-oared shells, besides two four-oared lapstreaks, all in good condition.

The members of the clubs are all midshipmen of the various Classes, and are about thirty-five in number. The boats are all kept in a capital boat house, built under the lee of a large wharf, so that the water is always smooth in the vicinity. A number of improvements were made, however, during the spring; the floor was replanked, and is now three feet above the water level. In front of the house is a long float, which rises and falls with the tide, and leading up from it to the boat house is an inclined plane. The shells can thus readily be carried down to the platform and then thrown into the water without touching anything.

On returning from a pull, the crew step out, pick up the boat, and carry the whole thing into the boat house where they are capsized on horses.

In regard to training for these races, it can only be done, as before stated, in the time not consumed in study and other important academic duties.

Upon returning from the regular cruise, usually in September, the crews set to work to get the boats in working order, and in a few days, regular practice begins. The course is pulled over once or twice a day, besides going to any places of interest up or down the "Severn," to make the rowing consume about an hour and a half per diem, and

in this way the few warm weeks before winter are passed.

Exercise in the Gymnasium is also regularly maintained; practicing with dumb-bells, clubs and weights, for strength, and exercising on both the horizontal and parallel bars for the development of the chest.

This course is continued through the winter, taking care not to get too much of a good thing Immediately upon the opening of spring, Rowing is again taken up with vigor, and the course gone over daily. About six or eight weeks before the time for the regular spring races, all members go into strict training. They are restricted to training diet, and follow up, as nearly as possible, all the other requirements. The crews rise at 5 o'clock A. M., and exercise, or take a pull until 6 A. M., then breakfast at 6.45. Studies are then taken up, until 12-30 o'clock.

Exercise may then be taken until 1 o'clock, when dinner is taken, after which studies are resumed until 4 o'clock P. M.

Between this time and six and a half P. M., the crews take their second pull, after which supper is served; they retire at 9.30 P. M. The coxswain's orders used at the Academy are the following:

"Up-Oars."—Upon starting (say in a lapstreak.)

"Let-Fall."—To return to the rowlocks.

"Give-Way."—Bend forward and commence pulling.

"Hold-Water port." } In turning.
"Give-Way starboard." }

"Hold-Water all."—To stop the headway.

"Stern-All."—To back the boat instead of rowing.

"In-Bow."—To make fast.

"Way-Enough."—Stop rowing.

"Toss."—Lift the oars in the boat.

Racing in the Navy is not confined to the Academy alone, but is indulged in by our men-of-wars men, whenever opportunity offers, in all quarters of the globe.

Last season, there were several contests between the sailors of the United States war vessels and those of foreign countries, in various quarters of the globe, in most of which the Americans were victorious. The boats used by them are, however, of course, much different in shape and size, from the race boats used by shore clubs.

They are usually ship's cutters, or gigs, pulling sometimes single, sometimes double-banked oars. A spirit of rivalry exists abroad, upon this subject of boat racing, and considerable pluck and muscle are always required, and often brought into requisition, by the different crews, to maintain the honor of their flag. To be satisfied that our sailors are superior to those of most other nations in the use of the oar, it is only necessary to refer to the number of victories achieved by United States sailors over those of France, England and Prussia, during the past two years, in the Chinese Seas.

The last of these races occurred last fall, between a twelve-oared gig of the United States ship Sabine, and the cutters and gigs of a whole French squadron at Cherbourg, France. The latter had long been practicing for the trial, whereas, the Sabine's crew had hardly ever pulled together, up to the time that they received the invitation to join the race. The contest came off, and was viewed by multitudes of Frenchmen, to whose great surprise and chagrin, the Sabine crew distanced her numerous competitors, "with the greatest of ease."

This same crew of the Sabine were soon after beaten by a crew pulling two more oars, in the United States' ship Franklins' gig, the contest taking place in Villa Franca, Italy.

BOAT CLUBS OF THE UNITED STATES NAVAL ACADEMY.

First Class, or Class of 1870.—"Nautilus Boat Club."—One four-oared Paper Shell; One four-oared Paper Shell, (new); one six-oared Cedar Shell.

Second Class, or Class of 1871.—One four-oared Paper Shell.

Third Class, or Class of 1872.—One four-oared Lap-streak.

Fourth Class, or Class of 1873.—One four-oared Lap-streak.

ACADEMY BOAT CLUB.

COMPOSED OF MEMBERS OF ALL CLASSES.

One six-oared Paper Shell; One six-oared Cedar Shell.

NAMES OF CLUB, CLASS OF 1870, ORGANIZED IN 1868.

Wood, W. M.; Hubbard, J.; Kunhardt, C. P.; Merriam, G. A.; Angur, J. P. G.; Crosby, P. H.; Utley, J. H.; Nye, H. C.; Holliday, W. S.; Post, J. A.; Jacobs, H. M.; Spencer, T. S.; Dimock, M. C.; Milton, J. B.; Keeler, J. D.; Greene, H. L.

MEMBERS OF CLUB, CLASS OF 1870, ORGANIXED 1868.

A. Ward, C. D. Galloway, F. Guertin, F. E. Green, T. C. Wood.

MEMBERS OF CLASS OF 1872, ORGANIZED IN 1869.

R. H. McLean, B. F. Pinehart, J. C. Fremont, Jr., J. H. Weinlock, N. F. James.

MEMBERS OF CLASS OF 1873.

C. E. Fithian, F. W. Danner, L. Young, J. B, Culp, F. A. Wilner.

ROWING, TRAINING, ETC , ETC., OF THE HUDSON AMATEUR ROWING ASSOCIATION.

BY BENJAMIN F. BRADY, PRESIDENT HUDSON AMATEUR BOATING ASSOCIATION.

The Hudson Amateur Rowing Association was organized on the 26th of November, 1866, at the Convention of Rowing Clubs representing the Atalanta, Waverly, Columbia, Alcyon and Gulick Clubs, of New York. Atlantic Club, of Hoboken, New Jersey, Hudson Club, Jersey City, Essex and Nereid Clubs, of Newark, Palisade Club, of Yonkers, and Mutual Club, of Albany. The object of the Association is to better promote the interests of Rowing, and to inaugurate and perpetuate a series of Annual Regattas, to be given under the auspices of, and to be participated in by the members.

A Constitution, By-Laws and series of Rules, for the government of Regattas, was adopted, and an election for officers resulted in the choice of Benjamin F. Brady, of the Waverly Club, for President. Hamilton Wallis, of the Hudson Club, and D. W. Merchant, of the Mutual Club, Vice Presidents. Secretaries—J. McNulty, Alcyon; Chas. Tate, Columbia Club. Treasurer—Theodore M. Tuthill, of the Atlantic Club.

The first appearance of the Association in public, occurred on the 29th of May, 1867, which was designated as the opening day of the season.

On this occasion, a review was gone through with, thence a pull of about three miles up the river, ending with a dinner, at which about one hundred and sixty oarsmen were present.

From that day, the success of the Association was assured, and it has, from that day to this, been constantly progressing from good to better.

TRAINING, ROWING, ETC.

There has been no regularly universally adopted system of training amongst the different Clubs composing the Association, or crews and individuals engaged in the races. In short, it may not be inconsistent with facts to say that there has not been, in the opinion of the writer, a "properly" trained crew entered thus far in any of the contests; as the manner of training for a race is always left to the discretion of the individual, although he may be influenced to abide by the counsel of the Crew Captain. As regards habits, diet, etc., most all generally indulge in an early morning and evening pull over the course.

As to the necessity of a "coach" in training a crew it is certainly a great benefit, productive of excellent results, and is a feature in English rowing, Americans would do well to encourage. It is a difficult, if not an impossible matter, to explain, how a crew without a coach can be brought as near to a state of perfection, as a crew which employs one.

Coxswains are carried in the gigs and barges only; all the shells being constructed to dispense with them, and it is safe to predict that they will soon come to be a thing of the past, in all American shell races. Whether with or without a coxswain is the more practical or scientific, depends, in a great measure, upon the nature of the course pulled, and the efficiency of the bow oar; but an experienced crew can well get along without one. While the fact has been several times proven that a good coxswain has been the means of winning a race with an acknowledged inferior crew.

COXSWAIN'S ORDERS

Among the clubs of the Association, are given as follows:

1st. "Oars."—The crew raising their oars to an angle of forty-five degrees and then placing them in the thole pins.

2d. "Out"—The crew running their oars out to the proper distance for rowing, the blade being parallel with the gunwale of the boat.

3d. "Give-Way."—At the word "Give" throwing the handle of the oar forward well over the toes. The blade being at a proper angle to strike the water; and at the word "Way" dipping the oar in the commencement of the pull.

4th. "Weigh."—To stop rowing.

5th. "Weigh-Starboard," or "Weigh-Port." } To turn right or left.

6th. "Easy-All."—To slacken speed.

7th. "Oars-Apeak."—To salute when at rest. The oars to be raised perpendicularly, the handles resting on the floor, and the blades running fore and aft.

8th. "Weigh-Across," } To salute when under headway. Running the oars across both gunwales.
"Apeak." }

9th. "Let-Fall."—To regain former position. At the word "Let," raising the oar about four inches, and at the word "Fall," throwing it into the thole-pins, the blade "first" touching the water.

10th. "Across-Ship."—To get the oars in the boat. At the word "Ship," raising the oar at a distance to clear the heads of the crew, and dropping it lightly in the centre of the boat.

11th. "Trail-Oars."—In passing through bridges, culverts, etc., unshipping the oar and trailing it at the side of the boat.

12th. "Recover-Oars."—To regain former position.

The number of strokes pulled by the association crews it would be impossible to designate, with any degree of accuracy, as all rowers have their own peculiar styles; and in many cases a man, or a crew, may start at the rate of thirty-six to the minute and increase to forty, and finish at, or near, thirty-two. In practicing a crew, a "pull," and "tire out," is certainly detrimental to proper training, as a crew should "never" be over worked.

The mode of dipping the oar, among the association crews,

is, as a general rule, to immerse about one half the blade; row with the back straight, elbows well at the sides.

As will be seen in the constitution, the association vests its power in a board of delegates, composed of three members from each club, who in turn elect a commodore and an executive committee, who have full power to make all arrangements for Regattas and Reviews, select judges, procure prizes, etc.

The position of commodore has been held by the following gentlemen:

1866 and 1867, ...	Benj. F. Brady.
1868 and 1869, ...	David Banks, Jr.
1870, ...	Benj. F. Brady.

The Clubs composing the Association number in the aggregate about three hundred and fifty members.

ROWING AND TRAINING,

BY

GEORGE R. WRIGHT, EX-PRESIDENT N. W. A. B. A.

It is with great pleasure that I have learned of your intention to place before the public, at an early date, a Work on Boating, Rowing, and the Method of Training, as I have often felt the desire, as many others have, to possess such a book. In my estimation, there is no out-door sport so delightful, healthful, and possessing the same number of advantages as the art of Rowing. There is not a muscle in the whole body which it does not bring into play, thereby imparting strength and vigor to the entire body. There is no amusement in the world which affords a better test of the finest qualities of manhood than Rowing.

I feel greatly complimented in being asked by you, to contribute a few lines towards your Work, but must confess that it is with some reluctance that I comply, not that I grudge the time or trouble, but that I appreciate my utter inability to write anything on this subject, which will prove of interest to any one, knowing, as I do, that you have already contributions from Messrs. Blaikie, Brady, Josh

Ward, Roberts, and numbers of other men, who have been boating men all their lives, and are so ably qualified to write on that topic. Under these circumstances, it seems to me that it is not in the power of a Western man to add anything which can possibly throw any light on the subject. However, if any remarks from me will contribute to the pleasure of yourself, or any one who has the interest of boating at heart, I shall be delighted.

A Work such as you are now preparing, is one which has been often and badly wanted for some years, particularly throughout the Western States, where boating is, comparatively speaking, a new thing. For instance, the "Milwaukee Boat Club," an organization which has existed since the fall of 1855, although the oldest Boat Club in the West, and one of the oldest in the country, even after so many years of experience, is to-day, far below the standard which they should long since have arrived at, simply because they have not had the benefit of the proper instruction, either through a Work on the subject, or from some one proficient in the Art of Rowing.

Notwithstanding a large number of Boat Clubs have been organized through our Western country, during the past fifteen years, I am satisfied that more interest has been manifested and more steady progress made in this manly sport, during the last three years than there was during the previous eight or ten. Up to the year 1866, there seemed to be nothing to keep organizations of this description together. Boat clubs, although within a short distance of each other, were either ignorant of their close proximity, or lacked the "pluck" to enter the lists and measure oars with their neighbors of the same stripe, and as the mere ob-

ject of exercise was not sufficient, in a majority of cases, to keep up the proper and necessary interest, the organizations, one by one, dropped out of existence, and either left their boats and other property to rot where they stood, or parted with them for a mere song, to a fresh organization which had its day, and eventually followed in the footsteps of its predecessor.

It was not until the month of October, 1867, that any real interest or excitement in boating matters in the West, seemed to manifest itself.

This was occasioned by a friendly race between the Milwaukee Boat Club and Detroit Boat Club, which took place on the Detroit River, on the 3rd of October 1867. In conversation with a number of our Western boating men, during the last year or so, I find they are inclined to sneer or laugh at that little race, either on account of the style of boats used or the time made in the race, or, perhaps, the condition of the two crews, but if they will only think for a moment, they will agree with me in saying that that small event did more towards building up the cause of Boating in the West, than all the interest manifested in various localities, or the sums of money spent on boats, previous to that time. It was the very next spring that, encouraged with the success our undertaking of the former season had met with, a few of the most sanguine of us undertook the organization of a boating association, believing in the old adage, that "in union there is strength" and that if it was practicable to once unite our boating interests, we would then have something to work for, and keep up our organizations, besides affording an opportunity of meeting, at least once each year, and discussing matters of interest and giving each a chance to prove the pro-

gress they might have made during the year. At first, to be candid, it was rather doubtful where we were to get the clubs from, as we then only knew of two. But "where there's a will, there's a way;" and persevering, we finally succeeded in gathering together the fragments of a sufficient number of boat clubs to ensure our ultimate success, and on the 29th of October, 1868, seven organized Boat Clubs sent delegates to the City of Milwaukee, and then, and there, the first regular, and, I sincerely hope, permanent organizations of our Western Boating Men was formed, for the purpose of —as the Constitution of the Association declares—a friendly union of all clubs and individuals interested in the healthful exercise of boating, for the more effectual promotion and protection of their rights and interests, and to give, annually, a Regatta, during the month of July, at such a point as should previously be agreed upon. The Association accomplished the desired object and proved a success, and I feel certain that all parties who contributed, no matter at how much sacrifice to themselves, towards starting it, feel amply compensated for their labor.

All the old Boat Clubs throughout the West were reorganized and new ones started, and the following year, 1869, on the 8th and 9th of July, at the City of Toledo, Ohio, the Northwestern Boating Association gave its first Annual Regatta, which was admitted by all to be the grandest affair of the kind ever witnessed in the West. It was during this Regatta that the question was raised whether any difference in time should be allowed between the different classes of boats (for, at that time, there were not two boats alike in the Association) and after considerable debate on the subject, it was finally agreed that no difference should be allow-

ed. This decision may have caused, at the time, some little dissatisfaction among the crews and clubs, but they have since seen that it was a wise one, as it forced all clubs who expected to compete for prizes the next year, to procure first-class boats, which was demonstrated at the 2d Annual Regatta of the Association, held at Detroit last year.

With very few exceptions, every boat entered for those races was of the latest model, dispensing with the services of a coxswain. The Regatta at Detroit passed off splendidly, being, if possible, a grander success than the one held the previous season, and we have every reason to believe and expect that each years' meeting will exceed the last one, and that at no very distant day, the Northwestern Amateur Boating Association will be one of the strongest organizations in the country.

The time made by the winning boats at the two Regattas held under the auspices of the Association, when compared with that made by some of our Eastern brethren, may perhaps seem to them, and to the community at large, as being rather "thin," but time, patience and perseverance will overcome innumerable obstacles, and the day may soon come when our Western boys will crowd their rivals on the home stretch.

Notwithstanding our Eastern friends have the advantage of us in being able to procure their shells at home, we are plucky enough to send down there for them, and at the present time, every Club in the Association has at least two eastern built shells in their possession. It would be a treat to our friend, Charles B. Elliott, if he could witness the large number of his beautiful shells on the water at the

same time, which we have at our Regattas. It is not my intention to enlarge very much on training, as I should only prove my own ignorance on the subject, and prefer, therefore, to leave that to yourself, and will content myself with making a few suggestions, which will, of course, be of very little interest to those who heretofore given the matter of Training any great amount of attention, but may be of some use to beginners throughout our western country. In the first place, in reference to boats, I should advise any Club or Crew who expect to do any pulling, to procure a first-class shell of the latest model, without coxswain. If you have no one among your number who understands shells, leave the dimensions of your boat entirely in the hands of the builder, and you will not lose anything. When you get into her for the first time, don't make up your minds that she must turn over with you—it is not at all necessary. A shell, with a crew in her, providing the rowlocks are properly guarded (as they always should be, by a small wire wound round the top) may be swamped by a tug or steamer without turning over. The art of steering, by means of a traveler, is one which can only be learned by practical experience, but will not prove a very difficult matter, and with a little confidence, is soon acquired. The great beauty of steering in this way is to use the rudder as little as possible, for every time you bring it around it retards your boat. Of course, at the turn, you make use of it to bring the boat round, but on a straight course you can keep your boat on her course by cautioning the men on one side or the other. For instance, if she is going a little to the port side, caution the port side to put on a little more "beef," or command starboard to "ease up" a little, and in this

way you bring her back without checking her speed. It is not necessary for the bow oarsman (who, in most cases, manages the traveler) when he has a straight course, to be constantly turning round to see where he is going to, as, if before starting he takes a mark on the shore in a line with the stake, and once gets his boat into this line, he will have no difficulty in keeping her all right, until he gets very near the turning point, when he will have to look round, in order to make as short a turn as possible.

The true principle of training, says an able writer on that subject, is "to nourish the body as rapidly as possible, and at the same time get rid of the 'loose' or 'soft' flesh." In many instances, the training done by our Western Clubs has been either a perfect farce, or in the other extreme, has been too severe. In my opinion, an over-trained man is worse than one not trained at all, as he has not the back bone to carry him through; while the latter, if plucky, will stick it out, although he may injure himself in doing so. The trouble seems to be that Clubs, notwithstanding they have a whole winter and spring before the Racing Season, which gives them time gradually to get themselves into the proper condition, neglect to do so until a month or six weeks before they are going to pull, and then expect to attain, in that short time, what will naturally require three times as long.

A fatal mistake is sometimes made in taking violent exercise immediately after arising, and, consequently, on an empty stomach. This is one of the best ways in the world to run a crew into the ground. A walk of three or four miles, commencing at a slow and easy gait, increasing the speed gradually, and ending with a trot for the last three quarters of a

mile, is as violent exercise as should, in my opinion, ever be taken in the morning before breakfast, but under no circumstances should they attempt to pull at that time. Neither should a crew be allowed to pull more than once each day 'on time." I don't mean by this that they should only pull once a day, for I think they ought to have a pull in the morning, about an hour after breakfast, and again about five or six oclock (not later than seven, as the evening air is apt to be damp,) and at this time they should pull over the course, easy the first time, and then after they are warmed up a little, try it on time. The effect of pulling on time, whenever you get into your boat, is to wear yourself out, instead of improving your condition.

The most essential part of training is the perfect regularity which should govern all one's actions. Men in training should always be up at six in the morning, and never out of bed after ten at night; their exercise should be taken at certain hours each day, and meal hours should be equally as regular. So far as the matter of food is concerned, I have no faith, whatever, in bringing a crew down from their accustomed diet to a certain fixed bill of fare. In selecting material for a crew, you are supposed to make choice of perfectly sound and healthy men, and if you have this at the start, I can't see how you will be likely to improve them by feeding them on "raw meat," which, in some cases, is almost repulsive, and is taken more as a child takes castor oil, (because it has to,) than as a refreshment. Of course, excesses of all kinds should be avoided, but if a man is accustomed to eat well-done meat, let him do so still, and if he prefers it rare, let him have it rare. But giving the men the liberty to choose there own diet, does not include the privilege

of indulging in oyster suppers, or ice cream, at 12 P. M. ; for, as I said before, irregularities of all kinds are to be avoided. Fast women, whiskey and tobacco are the three indulgences most difficult for a crew to break off, if the desire for them has once been acquired, but they are the perfectly healthy mans' worst enemies. No crew can ever put themselves in any sort of condition unless they persistently avoid each and every one of them, and they must see, on reflection, that no amount of training will benefit them one particle, so long as an appetite for these vices is gratified.

If your men are in the habit of taking a glass of ale or porter, at dinner, each day, I should let them do so still, but should not recommend this to those who are not accustomed to it, for the less liquids used at a meal the better, as they retard digestion. If the men complain of boils, (which will, in most cases, make their appearance on men during the process of training,) don't let them quit under the supposition that they are injuring themselves, as these little "blessings" are the best evidence in the world that the mode of training is a success, and that the sufferer is in this very way working off all impurities from his system. No man ever went through a course of training who was not favored with them at some time or other, and often to such an extent as to render him unfit to pull in a boat, in which case he would have to discontinue doing so for a day or so ; but, in the mean time, there are many other ways of taking exercise, so that he need not fall behind the balance of the crew until such time as he is able to resume his position.

To train for a race, is a matter which requires a great deal of sacrifice and self-denial on the part of those under-

taking it, and, for this reason, I regret to say, it is very often attempted by a crew, and after a short trial, is abandoned.

Perfect discipline is absolutely necessary ; there must be but one "Captain," and all the balance of the crew should be literally machines, subject to his control. This, every one who tries training must make up his mind to, before he becomes a candidate, and resolve to patiently submit to what is only reasonable.

I admire exceedingly, the plan which has been almost universally adopted by our more experienced Eastern boating men for selecting material for a crew, viz : To first make choice of a Captain who is supposed to be the one best qualified for that position, and then let him select his crew.

It used to be customary here, to have a committee select the crew, and this plan has, in many cases, given great dissatisfaction, as prejudices and preferences are very apt to govern the selection made, instead of relative worth and capability. By adopting the former plan, you place the whole matter in the hands of one man, and hold him responsible for the condition and qualification of his crew—and he will invariably select men because he feels they are capable of filling the bill, and is not liable to let personal feeling have much weight in the matter, where his own reputation is at stake. When a Trainer is employed, I do not think he should form one of the crew, as with the present style of shells, every one has all he can attend to properly, to mind his own business, without watching and correcting the movements of any one else. The Trainer should either ride along the bank, where he can observe and

warn each man of his irregularities, or, if this is not practicable, he should row alongside in another boat.

The principle of having a separate course laid out for each boat (which has been adopted by the N. W. A. B. Association,) is, in my opinion, an excellent idea, as it removes all possibility of the boat's fouling, either on the course or at the turning point, and consequently makes it a very easy matter for the judges to give their decisions, and never renders it necessary to have a race repeated. Where separate courses are laid out, the course to be pulled over by each boat should be decided upon prior to the race, by the Captain or Coxswain of each boat drawing lots.

With these few general hints, I shall conclude, and leave the task of laying out a course of training, in all its more minute details, to yourself or some one else, who has had more experience in the matter.

UNDINE CLUB, ERIE.—METHOD OF TRAINING.

BY R. E. CLEMENS.

In the morning, running or walking exercise, for about an hour, to help the wind; after which no more exercise is taken until evening, at which time an hour's rowing is generally taken during regular training.

The diet is beef steak or a roast, cooked rare, good, sweet bread, either brown or white, or both, and vegetables; very little butter or grease of any kind; no coffee, tea or stimulant of any description, cold water is the drink, and no limit is placed upon the quantity of food eaten.

Rowing in the morning is not considered good training, as they find that they cannot rise from bed, and step into a boat, and take a long pull, without great fatigue.

Their style of stroke is about thirty-eight or forty to the minute, and employs the arms, back and legs, bracing firmly against the stretcher, and thowing the head back to facilitate respiration.

The place for the stroke oar, in the "Volante," is on the "port" side, in the "Minniola," starboard, in the shell, Port.

Coxswains are used in all of the boats, excepting the shell, which is traveler-rigged.

This Club is one of the Northwestern Amateur Boating Association, composed, like a majority of amateur clubs of the United States, of business men and clerks, for whom it is almost impossible to go through a regular course of training.

The Club expect, however, to figure more prominently in the aquatic world, in the future, than they have done in the past.

ROWING AND TRAINING IN GEORGIA.

BY

A. M'C. DUNCAN, SAVANNAH.

With reference to the various inquiries made in your Circular of February, I will answer as they are propounded:

With this I send you copies of the Rules and Regulations governing the three Boat Clubs in Savannah, as also a copy of that for the Regatta Association.

From what I can learn, it has been seldom that the stroke has been upon the port side.

Prior to the formation of the Amateur Club, in 1859, the oars were made of yellow pine, well seasoned, with round looms, and straight blades.

In 1859, the spoon blades, with round looms, and made of spruce pine, were first introduced.

Since then no other material than spruce pine is used, more because of the facility with which they can be obtained; some doubt being entertained as to their superiority over a

"well seasoned" yellow pine straight blade. As to dimensions of oars, in length, from twelve to fourteen feet—with blades from six to six and a half inches wide at the tip. Only one set of square looms have been tried, viz: last year, and have been discarded since.

No system of training has ever been fully practiced, though attempts to approximate to that system laid down in Stonehenge, have been irregularly and inadequately made.

As to the style of stroke that has been generally pulled—a long reach forward, pulling with the back, arms stiff or straight, until the body passes a perpendicular.

The average stroke is about thirty-six to thirty-eight per minute.

The canoe boats retain their momentum, it seems, longer than the shells. All boats, previous to last year, have required a coxswain, but we have with us now a boat without coxswain, the "Queen," which will appear in our next Regatta.

We are anxiously seeking information upon the point, as to whether she should make any allowance to the boats with coxswains, and if an allowance is to be made, how the same is to be estimated, and upon what basis.

As to the etiquette among crews meeting, I may gladly say, that while there has never been any set rules recognized or known of, the behavior of rowers is invariably marked by courtesy to each other. To halt and peak the oars, has been practiced somewhat as a salute, the coxswain lifting his hat. It has been sometimes the rule to peak oars, immediately after passing the terminal buoys in a race. On the conclusion of a race, it is considered a proper compliment to escort the winning boat to her resting place.

On the part of the crew of a boat toward its coxswain, full respect is maintained and a cheerful alacrity displayed in obedience to orders.

Of single sculling, we have had but one opportunity of forming an opinion, and such an "impromptu" effort as was then made, to develop this very interesting and benefiting branch of the sport, could not be regarded as giving any suggestions as to the style, or other details.

Training.

AMATEUR AND PROFESSIONAL.

TRAINING.

INTRODUCTORY AND HISTORICAL.

Animals, of all classes, from the fighting cock up to man, the highest type of the physical creation, have been, for centuries, systematically schooled and trained for purposes of rivalry in physical contests of all descriptions.

The game cock, from having been originally a barn-yard fowl, has, by the system of breeding and training, been transformed into a feathered pugilist, the sole purpose of whose existence is to peck out the eyes and brains of as many of his own kind as possible, for the profit of his owner, until he himself shall pay the inexorable penalty of the pitcher which goes too often to the well, and is finally broken. The practice of bull fighting, in which one of the fiercest and most implacable of brutes, is pitted in a contest of life and death against man, is of great antiquity, and much time has been spent in speculating and commenting upon the moral effects of such exhibitions as bull-fights upon people who engage in and encourage them. Of the moral lessons to be learned from such exhibitions, it is not the

province of this Work to treat ; but, one fact becomes patent to the most prejudiced, and that is the wonderful courage, agility and endurance displayed by the man, who relies solely on his muscular strength, steady nerve and faultless sight.

If there be any doubt in regard to the morality of bull-fighting, there is certainly none respecting that of rat and dog bating. A rat-pit contest, depraved and disgusting as it certainly is, yet furnishes another instance of the unquenchable passion of men for witnessing bloody and ferocious exhibitions, no matter at the expense of how much physical torture, provided only there is blood drawn and life lost or greatly imperilled. This passion for destroying life seems to be the cardinal one of man's nature, and one which doubtless he will never overcome, until the fulfilment of that prophecy : "Peace on earth, good will to men." We are told that the civilization of to-day does not know the wicked institutions of the "dark ages," but there is good reason to believe that there are some among us who, "having eyes see not, and having ears hear not ;" else, why does the nineteenth century witness the spectacle of two millions of men engaged in the work of human slaughter ?

Training, or exercise and regimen was resorted to, originally, we have reason to believe, for the preservation of health among mankind and the removal of disease. Physiologists now know, as they have known for centuries, that the human body is composed of solids and liquids, which are successively absorbed and deposited. A continuous renovation is the consequence of this physical law, and the nature of this renovation, as a matter of course, will depend upon the nature of our food and general habits.

If this absorption and renovation is impeded, ill health ensues, in obedience to the law of cause and effect, and it has always been found that no medicinal or other agent is so effectual a promoter of healthy absorption and secretion as exercise, judiciously taken.

Health, strength and activity, both bodily and mental, are invariably the accompaniments of a course of physical training. It may be said that training is not resorted to at the present day as a means for overcoming disease, and although I admit the truth of the assertion, it does not disprove my statement.

There are two reasons why physical exercise is not resorted to by a great many persons afflicted with disease, and those particularly of bilious and rheumatic natures. One is that although the name of the diseased is legion, the doctors of physic and the "pseudo" M. D's. are, numerically speaking, especially the latter class, by no means insignificant, and the competition for trade is immense.

The stomach of a patient, to most of that class of the community who style themselves doctors, always acts as a medium by which the doctor conveys nauseous medicines into the system of the patient and filthy lucre into his own pocket. In a majority of cases, the much abused stomach presents too great a temptation as the vehicle for conveying benefit (?) to both parties to be resisted, and the patient, while being informed that in olden times he would have been bled (which would perhaps have cost him a shilling) for the same complaint from which he is being releived in so agreeable a manner, scarcely reflects that he is being "bled" now, although, in a different way, much more profusely.

It is not politic, then, for doctors to prescribe pure air and

exercise, which cost nothing, in preference to adulterated decoctions, which will serve to keep the patients' system in a disturbed condition, and make a profitable case for the physician. The distaste of the pill-swallowing community of the present day, to the gigantic bolusses made use of by the most ancient of the "pathies," and their evident preference for medicine, in some shape, to exercise and training, as a means for procuring freedom from their complaints, has developed a new "pathy, or school of medicine. The infinitessimal doses of this school are always agreeable to the palate, and are easily taken, and are said to be infallible for cure, where cure is possible.

It is no wonder then, that when immunity from disease can be purchased at so trifling a personal inconvenience as the swallowing of a few sugar pellets, a large majority of the community shonld prefer that method to physical training which necessitates regular hours for eating and sleeping, temperate habits and cleanliness.

If one whose habits are gross can be cured of an indisposition by taking a little medicine, while at the same time he is permitted to gluttonize to his fullest desires, it is scarcely to be doubted that he will prefer taking that medicine, rather than to adopt a course of treatment which would require him to moderate his appetite. It is in these reflections that we can find an explanation to the question: Why do not people take more pure air and bodily exercise and less of the doctors' medicine? But, if mountebank physicians are to be accused of criminality in the manner above referred to, what is to be said of the thousands of patent medicine venders who enter into the manufacture of medicinal cure-all, or rather kill-all poisons, on such

a gigantic scale as we see on every side in all large cities?

The immense fortunes amassed by these traffickers in the misfortunes of mankind, is sufficient evidence of the scale upon which they carry on their nefarious business, and if statistics could be procured, showing the amount of what is termed patent medicine that is annually consumed in the United States, it would present a frightful spectacle, especially when we reflect upon what is certainly very probable, to-wit: that in nine cases out of ten, these very agents which are given and taken as cures for disease, really produce and aggravate disease. Until the Government refuses to grant licenses to persons engaged in such enterprises, however, there is likely to be an increase of the traffic, rather than a diminution of it.

That portion of the community styled "gullible" is a very large one, and any person happening to be "out of sorts" that sees his or her, identical case described in every paper and magazine;—a long list of symptoms, with a fearful warning of what "may" be the result of delay, can scarcely be blamed for snapping at the bait and purchasing just one bottle upon the wrapper of which he learns that from eight to ten bottles will be needed to effect a cure, and certificates are attached as proof of this statement.

It is being so continually dinned into our ears that no age has been so prolific as the present, in wonderful discoveries and inventions, that one cannot wonder much at people believing that medicinal compounds can be prepared in vats full, possessing curative properties for diseases of all kinds, no matter what the dissimilarity of circumstances that environ them.

Bodily exercise in America, amongst the class of popula

tion which has been styled "well-to-do," suffers greater neglect than in any other country in the world. This is not by any means to be attributed altogether to laziness, as the "push" and "snap" of Americans is proverbial the world over; but the passion for wealth has become so universal and wide spread, pervading all classes, ages, and sexes alike, that the considerations of health, and it might also be said, of spiritual happiness. are made secondary to the attainment of riches. But this passion is inherent in man, and like many others, only requires the necessary exciting causes to develope it.

America supplies these causes to a greater extent than any foreigner can imagine. Enterprises of all magnitudes are forever being undertaken, and to the credit of the American people be it said, are usually successfully accomplished.

So far, it has been all work in this country, but every day brings "spare hours" to a larger portion of the population, and the preachers of the doctrine, "cleanliness is next to Godliness." are multiplying in our midst. Bodily and mental strength and vigor among the ancients seem to have been the stepping stone to prominence and distinction. And the proof of the one always lent greater force to the claims of the other. It is stated that Herodicus was among the first to apply gymnastics and other exercises to the cure of disease, and Celsus says that Asclepiades so radically adhered to this doctrine of expelling disease and preserving health, by means of muscular exercise and regimen, as to have almost entirely abolished medicinal compounds from his practice. He advocated and invented several systems of gestation for health, which became very popular among the Romans, and while still quite young, he publicly declared that he would renounce all claim to the title of physician,

should he ever be attacked by disease or die but of extreme age. This boast, rash though it was, and blasphemous, was fulfilled, as his death was caused by a fall in about his hundredth year. Physically, he was a type of perfect manhood, as well as a living example of his own system. The human body is a machine, which it requires more nice care to keep in order than any of the vast numbers subsidiary to its will and power, and a "loose screw" in it will tell, as surely and as quickly as in any other. All the different parts of the body are in communication with each other, either directly or through a common medium. To keep the body in good condition, each seperate portion of it must be kept in a healthy state, and this can only be done by establishing and maintaining a healthy vital force, whose action will affect alike muscles, bones, lungs and nerves.

Exercise, of necessity, strengthens every portion of the body, whether of the intellectual, locomotive, or vital system. In regard to the first of these, the intellectual system, Sir J. Sinclair observes that physical training improves the mental faculties, doubtless, by facilitating digestion, giving tone to the stomach and ready perception to the mind. That the locomotive system is greatly benefitted, it will require no argument at all to prove, as every one has evidence of this in his own person. The vital system must be benefitted by training, as bottom or wind, is the main stay of the system, without which muscle would accomplish but little.

A man in training always draws a longer breath, and can retain it much longer than when out of condition.

The principles of training are not very numerous, and the rules are not at all difficult to follow. In the first place, the bowels are evacuated, by which means the stomach and intes-

tines are purged of all impurities. In the second place, the deleterious excressences, such as boils and all humors of this description, are carried off by the process of sweating. In the third place, the daily run and gymnastic exercises improve the respiration, while the diet and sleep, regulated properly, develop and maintain the strength of the entire body. The art of training was known to the ancients centuries ago, and practiced by them to an extent that would doubtless surprise many of our present day progressive people, who, though they solemnly avow their belief in all that the Bible teaches, yet go so far as to doubt what Solomon says is a fact, that "there is nothing new under the sun." The athletæ of Greece, who contended for the honors in the public games, usually underwent a ten months' preparatory training. They were compelled to abstain from the use of liquor and to cease all vicious indulgences.

The distinction and notoriety, connected with excellence in the exercise of the palæstra were probably the causes which operated to lower it from the rank of a liberal art to that of a degraded profession, which was embraced only by the lowest class of men ; the same kind as those of the present day, who fight for the championship of the prize ring. The combatants, however, then as now, were splendid specimens of physical beauty, and were regularly trained for their contests.

The athletæ were subjected to the evacuating process, which a majority of them preferred to purging, and in the early stages of training, their diet consisted of boiled grain, new cheese, and dried figs.

After subsisting for a time upon these articles, animal food —most always pork, was added to them. The fact that

this food was found to increase their bodily vigor, is evidenced by Galen, who says, that if they lived but for a single day upon any other kind of food, their strength was manifestly impaired upon the day following. Modern trainers differ with ancient ones, to the extent of rejecting it altogether from their articles of diet, as experience has proved to them that it is almost the worst animal food they could use. But if they differ in regard to the character of the meat used, they agree as to the manner of preparing it. Roast or broiled are about the only ways of preparing meat for men in training, at present, as they were then, and unfermented bread is preferred to that prepared by leaven.

Water was not allowed but in small quantities, and even now, many trainers restrict their men to a certain quantity of liquid, though this system is pernicious, and, I am happy to say, is fast losing ground, in favor of a more liberal and beneficial one.

The principal schools of the athletæ were at Capua and Ravenna, in Italy, places noted for the purity and healthfulness of their atmospheres—as pure air was considered by the ancients a chief requisite of health, though modern teachers and law-makers, seem to entertain an opposite theory.

They exercised mostly in the open air, thereby becoming accustomed to all the changes and vicissitudes of the weather, which soon ceased to trouble them, and also served to toughen their skins, a quality peculairly necessary to them, but which is not essential to a well-trained oarsman of the present day.

Occasional flogging was also resorted to, to test their powers of endurance, and to enable them to bear with patience, bodily pain and suffering. As considerable blood was usu-

ally drawn by the flogging, it generally proved beneficial by removing the tendency to redundancy of the circulating fluid, and plethora, to which they were subject, which proves that their diet was nutritious and strengthening.

Upon the conclusion of their usual daily exercises, the Athletæ betook themselves to the bath—always a tepid one—when the perspirable matter, scurf, etc., was removed by friction, or rubbing with an instrument denominated the "strygil." After leaving the bath, the skin was rubbed until it glowed, and then annointed with oil. If thirst was experienced, a small quantity of warm water was permitted. The principal meal succeeded this bath at the close of the day, and was succeded by a season of rest until the following morning. The cold bath was only resorted to occasionally, and then always in the morning.

It was supposed that bodily vigor was greatly increased by sleep, and the candidate was permitted to sleep as many hours as he chose. The method of training among the ancients was fully as strict, and, indeed, more so, than that of the present day, and the difference in the kind of food and regimen, is partly owing to the difference in climate and manner of living, but mostly to the fact that the physical qualities and characteristics of an ancient athlete were very different in nature from those of a man in training at the present day, for rowing or other similar contests.

The extent to which the physical capabilities of a man may be developed by training is simply wonderful, and if only a theory would scarcely be credited, but every one has seen it practically demonstrated in the daring feats of professional gymnasts and prize fighters. It is an indisputable fact, that by emptying the cellular substance, extenuating the

fat, hardening the muscular fibre, and improving the bottom or wind, a man will be enabled to exert himself to his utmost for from fifty to eighty minutes, either in the ring, at the oar, or in a pedestrian contest.

So much then, for the system of training practiced by the ancients ; now, for a short glance at the method pursued forty years ago in England. Captain Barclay was the chief authority of this period, and his teaching was followed by both professionals and amateurs. According to his method, the candidate, who was supposed to be in tolerable condition, entered upon his training with a regular course of physic, which embraced three doses. Glauber's salts was generally preferred, and from one ounce and a half to two ounces was taken each time, with an interval of four days between each dose. After finishing the physicing process, he commenced regular exercise, which was gradually increased from the primary to the latter stages of training. His training was mostly for pedestrianism, and he usually required walking and running exercise to the extent of twenty or twenty-four miles every day.

The party was obliged to rise at 5 o'clock, run a half mile up-hill at the top of his speed, and then walk six miles at a moderate pace, coming in at about 7 to breakfast, which consisted of beefsteaks or mutton-chops underdone, with stale bread and old beer.

After breakfast, he took another walk of six miles, at a moderate pace, and at 12, lay down without his clothes for a half hour. Upon getting up, he walked four miles, and returned by 4 o'clock to dinner, which was beef-steaks or mutton-chops, with bread and beer, as at breakfast. Immediately after dinner, he would run half a mile, at the top

of his speed, and walk six miles at a moderate pace. This concluded the daily exercise, and bed was taken at about 8 o'clock. Animal diet alone was prescribed, and beef and mutton were preferred; all fat and greasy substances were prohibited, as likely to induce bile, and consequently injure the stomach. Lean meat was generally made use of, because it contains more nourishment than fat, and fresh meat was preferred to salted. All spices and seasonings, with the exception of vinegar, were prohibited. The lean of fat beefsteaks, rather under-done, and accompanied with a very little salt, is recommended. Mutton being reckoned easy of digestion, was permitted occasionaly to vary the diet, and the legs of fowls were also esteemed.

Broiling was the usual mode of preparing meat as the trainers understood that the nutritive qualities were then better preserved than by roasting or boiling. Biscuit and stale bread were the only preparations of vegetable matter allowed, and everything likely to induce flatulency was carefully avoided. The quantity of aliment was not generally limited by the trainer, but was left to the discretion of the party himself, whose appetite was supposed to guide him in this respect.

Liquor was, and is to-day, invariably made use of by English trainers, and old home-brewed beer taken cold was perferred. For those who objected to malt liquors, about one-half pint red wine after dinner was allowed. It was required that only the very smallest quantity of liquid should be made use of.

After continuing this course for about four weeks, the party took a four-mile sweat, by running four miles in flannel at the top of his speed. Immediately upon returning, one

pint of hot liquor was taken, to promote perspiration. This compound embraced one ounce of caraway seed, an half ounce of coriander seed, one ounce of liquorice root, half an ounce of sugar candy, mixed with two bottles of cider, and boiled down to one half. He was then put to bed in his flannels, and being covered with six or eight pair of blankets and a feather bed, was allowed to remain for twenty-five or thirty minutes, when he was taken out and rubbed perfectiy dry. He was then wrapt in his great coat, and ordered to take a two-mile walk, at a gentle pace, returning to breakfast, which, on such occasions, consisted of a roast fowl. After this he proceeded with his usual exercise.

These sweats were continued weekly, till within a few days of his contest, or, in other words, he was subjected to three or four of these operations. If the stomach was foul, an emetic or two was given about a week before the conclusion of the training, and he was then supposed to be in the highest condition. Besides his ususal exercise, the party was advised and encouraged to employ himself in the intervals, in every kind of exertion that tended to activity, such as golf, cricket, bowling, throwing quoits, etc., so that during the whole day, both body and mind were constantly occupied.

Great changes have taken place in the method of training since that time, and, indeed, within the last ten years. Although the exercise is not less severe now than then, the diet is much more liberal and altogether more christian in character.

PRACTICAL TRAINING.

Lifting weights and swinging clubs,
  There's lots of that to do;
And pulling large and heavy boats,
  Is part of training too.
So when you've done your morning run,
  The day wears on apace,
And when evening comes, your rowing,
  Preparing for the race. —R. B. J.

The subject of practical training will now be taken up, and its relations to different classes of individuals, fully discussed, in order that trainers may be enabled to classify their men according to their physical conditions. A trainer is, oftentimes, called upon to take charge of and prepare for a race, a crew, of whose previous history and personal habits, he knows nothing; and he is usually expected to put them in the best of condition, within the space of a few short weeks. It behooves a man who undertakes the care of

a crew, in this manner, if he desires to maintain his reputation, to inquire into and ascertain, as far as possible, what the previous habits of each and every candidate have been, and to impress him with the importance of his position and the difficulties likely to beset him.

A course of training, to prove really beneficial, must be accepted as a pleasant task, and not as a disagreeable piece of work, which is compulsory and not at all desirable. Before commencing, every man should be made to undergo a thorough physical examination, in order that any unsoundness may be detected, as none but perfectly healthy men should ever be selected to undergo a vigorous course of training.

The object of training is to strengthen and utilize every portion of the frame, in order that the body may put forth its utmost power, in a long continued effort (such as would be impossible to a man in ordinary condition) without feeling any injurious effects. A boat's crew, in good condition, can pull a five or six-mile race, exhaust almost every particle of muscular strength, come home blinded from congestion, and yet incur no danger of serious consequences, whatever; and, in a majority of cases, a few moment's rest will enable them to repeat the effort. Grit, when it constitutes one of the characteristics of a well-trained man, will usually ensure success at the oar, but unless accompanied by good condition, it is likely to prove a misfortune to its possesor, if pushed in a hard race. The excitement consequent to a boat race, taken in connection with the "warmed up" feeling that comes over a man, are agents that will cause him to over-exert himself, without realizing it, at the time, if not well trained.

A good many men have doubtless injured themselves

by undertaking feats of physical strength, beyond their ability to perform, and it would be far better to sacrifice the honor that accompanies success, than to sacrifice one's health in attempting to attain it, if either is necessary.

It is claimed by some oarsmen, that a man who is "in good health," and about to undergo a course of training, does not require any medicinal treatment at all, and not very strict regulations as to diet and exercise.

With all such, however, I beg, most uncompromisingly, to differ, for several reasons. In the first place, the class designated by them as being in good health, embraces all those who are not confined by sickness, which is far from being the case, as a man might carry impure blood in his veins for a lifetime, and never be sick. In the second place, as to strictness of diet and regimen; abundance of muscle, great breathing capacity or lung power, pure blood, and solid flesh, are indispensable requisites to a well trained man. These are obtained by a sufficiency—not a superabundance—of sleep, pure air and water, good nutritious food and regular exercise; and by these agents only.

Only certain kinds of food and certain liquids can be made use of for training purposes with advantage, and if these are discarded, and every man is permitted to tickle his own palate, it is difficult to discover how good condition is to be attained. We will suppose, then, that a crew of sound men have been selected to undergo a course of training, and explain the manner of preparing them according to their respective conditions at the time of such selection.

There will not be one man in a hundred, probably, who has not been, up to that date, a pretty constant smoker, or chewer, or drinker; very likely both of these, very probably all three.

These excesses, have, perhaps, been indulged by men, some of whom lead sedentary lives, while others are engaged in active business. The prospect of forming one of a racing crew, will usually exert a very beneficial effect upon a man; strengthen his determination to discard his vicious practices, and buoy him up for the work he has in hand. And the difficulty of resisting the temptations which on every side beset him, is fully as great as that of performing his crew work. The mode of treating a man who is run down by close application to business, in conjunction, perhaps, with good living, is somewhat different from that required for one who has exercised pretty constantly, but has injured himself by a too liberal use of tobacco, spirits, and etceteras. The result to the health of both, has been pretty much the same; impaired digestion, disturbed and irregular repose, and consequent enfeeblement of the whole system. Social rank, personal habits, and individual temperaments, will necessarily vary the bodily conditions of the candidates, and require special consideration.

A college man is, from his mode of living, very often the most difficult to handle, but, as a general thing, now-a-days, they are found to live in a rather Christianlike manner. The favorite son of a wealthy sire leaves home to finish his education at one of our colleges, and has abundance of means furnished him with which to gratify every longing of his appetite. We will presume that he is not a confirmed debauchee, and that his dissipation is accompanied by considerable active exercise. If healthy and robust, the undermining of his constitution will be gradual, and, perhaps, for some time, not noticeable. But the change comes some time, and worn features, dimmed and blood-shot eyes,

are the external evidences of weakened digestion, feverish blood, and tottering mind within.

When a man carries with him every evidence of weakened frame and great debility, it would be sheer wickedness to start him in active training, as the result would be likely to be anything but beneficial. His preparation must be very gradual and cautious, as, otherwise, he will be totally unable to perform his duty, as his strength must inevitably fail him. His vices must be dropped at the start, and a moderate amount of exercise commenced.

In addition to this, his diet must be cautiously changed, and a course of bathing entered upon. In a short time his appetite will improve, his strength return, and his sleep be sound and long. The amount of work to be done can then be increased to any extent desirable, and the man is once more in good condition.

There is another individual selected for a crew, whose living has not been nearly so high as the former one, but whose dissipation, or use of tobacco and liquors, has been fully as great. His food is, perhaps, very spare, and his daily labor not very active or severe. His pipe is scarcely ever out of his mouth between meals, and then only for the purpose of admitting a bunch of "fine-cut," or a glass of liquor. His energies soon begin to fail; he seems as if in a continual fog, and his flesh becomes soft and doughy. He is unable to assign a probable reason for his condition, other than the want of proper exercise, and so having, perhaps, occasionally rowed a little, he resorts to a boat, with the expectation of finding an increase of power. The result of his pains is unexpected and unsatisfactory, and the party is usually apt to become so disgusted with the trial as to defer

him from any other attempts at restoring his health by exercise.

But he must not despair, as his case is by no means hopeless, if he acts with judgment and discretion, and does not expect too great a return of health, from too small an investment of labor.

There are other classes of individuals who are chosen as members of racing crews, especially in cities and places where the club is not connected with an educational or any similar institution. One of these occupies the position of book-keeper, cashier, or copying clerk, in some office, store or bank. His whole attention is given to adding up columns of figures, settling mathematical results or, perhaps, maintaining an arduous and responsible correspondence. This makes so liberal a draught upon his muscular and nervous strength that he loses all life and energy, and at last finds himself scarcely able to stand up to his desk, or to concentrate his thoughts upon his work. He may, it is true, rise early, take a walk, or if his means permit, a horse-back ride, and expect that such exercise as this will serve to keep him in good health. But while his system is daily subjected to such a drag, he can only find temporary relief and support in this method of exercising.

Another class of men who sometimes suffer severely from over-taxation of their mental systems, are students of law, medicine, divinity and science.

Authors, writers and lecturers too, very frequently lose their health by too close application of their minds to their respective pursuits, prompted, as it often is, by a very laudable ambition for success and distinction.

Merchants, and business men generally, are not altogether

free from the injurious consequences which ensue from a too close application of the mind to one subject for a long time, and they must be considered as forming part of the same class with those above referred to. First, then, we will consider the case of a man, no matter whether he be a student, a writer, or a business man, who has been injured by

OVER-WORK.

A man looking to distinction, whether in a profession, or business of any kind, had better not lose sight of the fact that "haste makes waste," and that by constantly applying himself to study or business, in the hope of a rapid and prominent success, without allowing his body and mind to recuperate by a season of rest, he will find, in a few years, his pace becoming gradually slower, and his powers of application almost entirely gone.

Some very able men, both in the pulpit, on the bench, and in the professions, make themselves heard and felt by the influences of their powerful intellects, even after their bodies have become diseased and decerpit; but this is only because, when younger, they mastered and developed great ideas, which now shine forth in spite of their infirmities, and not because their bodily and mental powers are in a healthy condition.

A person engaged in studious pursuits should regulate his hours for study and exercise, so that he may do his day's work without feeling nervous and excitable. So many hours for study, so many for sleep, exercise, etc., should be the rule. But it is seldom that an ambitious man, as long as his

mind holds out, will devote any of his time to exercise, and if he does, it will be very likely of such a nature as will do him very little, if any good. When such an one is about to enter upon a course of physical training, he should, if possible, relinquish during this time, altogether, his books or accounts, and devote his time entirely to exercise and rest. If he cannot do this, and a great many, not their own masters, cannot, he should shorten his hours of study as much as possible, and endeavor to follow, as near as he can, the instructions upon training contained in this Book. His hours for study should be divided so as to leave intervals of considerable length between for exercise.

Breakfast should be taken at about 7 o'clock, after which the party should maintain perfect quiet for a half hour. The breakfast should be substantial, but not heavy, If coffee has been used, it should be continued; but none other than black tea ought to be used.

Study should commence at 8, and continue until 11, when a good long walk should be taken for one hour; commencing at a moderate pace, and increasing gradually. Upon arriving home at 12 o'clock, the party, who will most likely be perspiring freely, should lie down for twenty minutes, in some place not exposed to a draft, and rest. He should then get up and exercise with a pair of dumb-bells or Indian clubs for a half hour; after this, sponge off the face, neck and breast. Dinner should be concluded at about 1 1-2 o'clock, and a siesta of thirty minutes taken. From 2 o'clock to 5, reading, study, or whatever the man's business may happen to be, can be resumed.

At this hour he should resort to his boat, and starting slowly, gradually increase his speed, as in the morning

walk, until a pretty rapid stroke is attained. This should last about three-quarters of an hour, so that 6 o'clock will find him at home undergoing his ablutions, preparatory to the evening meal. Supper shonld be taken at 6 1-2, after a rest of about 20 minutes or so. When supper is concluded, no more study or labor of any kind ought to be taken, but any light exercise that will, at the same time, serve to amuse him, should be resorted to. Croquet, or any similar lawn game, when the weather is favorable, will be very agreeable ; when the weather is inclement, such games as checkers, cards, backgammon, etc., will serve to pass away a few pleasant hours until bed time shall arrive. He should retire at about 10, so as to have an abundance of rest, and be able to rise on the following morning at 6.

When the party first commences this preparatory training, his exercise should at first be rather gentle, so as to obviate any danger from overexertion, and afterwards gradually increased. If he has been a pretty constant smoker or chewer, he should cease this from the earliest possible moment. The use of liquor should also be abandoned, and nothing but coffee, water, milk or tea used as a drink.

On no account, should any of the nocturnal delicacies of the summer season, such as ices, julips, creams, etc., be partaken of, as their effects upon the system are anything but salutary. By following the advice given, it is certain that the over-worked man may either recover what strength he has lost, or develop largely what he may at the time possess, so as to be enabled to engage in active training, and contend successfully in almost any Rowing match. The next individual whom we are sure to meet in almost every selected crew, and whose physical condition we are bound to look into and consider, is he who "has liv-

ed not wisely, but too well." He is, emphatically,

THE MAN OF GOOD CHEER.

He may be a man who is not constitutionally lazy; one who exercises a great deal, but yet pays a serf-like homage to his stomach. His only difficulty, in getting into good condition, will arise from a want of self-command; an inability to say "no!" when his stomach calls for more. If he is pecuniarily well off, the difficulty is even greater than if he were otherwise circumstanced, as there is then no prospect of touching a tender chord, by a pull at his purse-strings, to which very many men are so sensitive. He may be situated almost anywhere, and his mode of living will be the same. "Eat, drink and be merry, for to-morrow we die," is an injunction only too universally followed, and a candidate in training, who has acted upon this principle, will need to exert his will-power to its utmost, in order to fulfill the requirements. If he has been only a moderate drinker, he will suffer no evil consequences by quitting the use of liquor entirely, from the start. But, if he has been a severe drinker, great care should be exercised in the manner of reducing his potations, as dangerous consequences are likely to ensue from too suddenly ceasing the use of alcoholic stimulants.

The best plan is to gradually decrease the quantity of liquid taken, and to substitute something else for the balance. The following draught has been very frequently prescribed by trainers for their men: Aromatic confection, 10 grains; sal. volatile, 1 drachm; bicarbonate soda, 5 grains; sweet gentian, 1 drachm; water, 1 ounce; to be

mixed together. This will prove especially beneficial to those who experience that "going" or falling sensation, which is the result of abuse from alcoholic and narcotic stimulants.

The above dose may be taken daily, or oftener, if it is found necessary, until the necessity for it ceases to exist. The diminution of liquid should go steadily on until it is found safe to do without it entirely. Liquor should be avoided by a man in training—or out of it either for that matter—as something as dangerous to his safety as a lee shore is to the storm-tossed mariner. There is not the same danger in summarily quitting the use of tobacco as in ceasing the use of liquor, and, therefore, no excuse can be found for its use. In diminishing the quantity of liquor, malt liquor will, if unadulterated, be the best, but where this does not prove sufficient, wine, or spirits, in small quantity, can be made use of, and for this purpose, an occasional glass of brandy and water, or claret, must be allowed. When the claret does not disagree, it proves an excellent wine for gradually lowering the stimulus. Where the digestive system has been very much disordered, the claret should be mulled and taken warm.

Excess in smoking and drinking produces abnormal secretion of the kidneys and skin, and this is the means by which nature endeavors to dispose of the poison absorbed by these agents. The effect, however, does not always immediately cease on the removal of the cause; hence the thirst continues, and some liquid must he taken to quench it. For those who can afford it, and for whom it is agreeable, claret and soda are very good, or porter, or beer, mixed with equal proportions of soda water. Purgatives, in such cases, must be used with extreme care. No person accus-

tomed to high living, will be able to bear strong aperient medicines, without running some risk or suffering some injury, and, although they are commonly administered, they should be given only with the extremest caution.

Where there is a healthy action of the liver present, a black draught may be taken, consisting of the following ingredients: Half ounce sweet essence senna, with a teaspoonful of salts, dissolved in warm water. Or, in lieu of this, one or two compound rhubarb pills may be taken at night. If the passages are of a slate or clay color, a five grain blue pill ought to be taken at night, and the above draught in the morning. Should a tendency to diarrhœa show itself, and the bowels act more than once a day, for any number of days, a wineglassful of decoction of bark, with a teaspoonful compound tincture of the same, should be taken two or three times a day. If the trouble exists, to a considerable extent, and the bowels are very lax, twenty to twenty-five drops of laudanum may be added to each dose; and if watery, with griping pains, twenty-five to thirty drops of diluted sulphuric acid may be given with it. In a majority of cases, the tone of the stomach will be recovered by the above remedies, and the diarrhœa will disappear, but if it does not, a physician had better be consulted.

During the preparatory process, the mind should be diverted and amused, at the same time that the body is being exercised and physicked. To this point great attention should be paid, as the success of the treatment depends as much upon the health of the mind as of the body. The care of the mind is something which receives very little attention, from trainers, and it therefore becomes necessary to impress

its importance upon them. Without some light amusement or recreation, the training becomes so much hard work, and fails in its object; it tires out the candidate, but does not restore his equanimity.

If the proper amusement is furnished to satisfy the mind, the trials and labors of training will scarcely be felt, and if felt at all, will be in such a manner as to create a desire for a contiuance of it.

Men in training, of the class now under consideration, should keep each other's company as much as possible, and by this means they will meet with less temptation and find less difficulty in overcoming it.

The diet should constitute a variety, and yet be substantial and nutritious. Roast mutton or beef, mutton chops, beefsteaks or poultry, may be used. Good fresh fish and game are not injurious, and certain kinds of pastry, if properly prepared, will do no hurt. Rigid dieting should be postponed until the period of active training, as the stomach will not usually stand it for a protracted period.

An immersion in cold water should be taken every morning, and in very cold weather, the temperature of the water should be between sixty and seventy degrees. A wet cloth should be used with which to rub the body until it glows. In the accomplishment of this portion of the work, the help of an assistant will be very desirable. If the reaction is speedy, a calico shirt may be put on, but if otherwise, it might be best to don flannel, especially in cold weather. It is not necessary to make use of flannel often, however, as one who is so delicate as to require it, will scarcely be strong enough to undergo a course of vigorous training.

This then, comprises about all that is necessary to say upon

this subject to those whose previous habits have been ones of dissipation, but who, at the same time, have exercised considerably in the open air. There is another class of individuals who live well, and take little or no exercise. This class of

WELL-FED IDLERS

Have pursued the same vicious practices as the preceding, but have not imitated them in their physical exercise. Their case is the most precarious of any, and will generally prove the most difficult to handle.

A greater amount of self-command, is required by one of this set than by any other, but as a matter of course, his will-power, like that of his body, has become enfeebled from lack of use, and will need considerable time to restore it to its natural condition.

Exceptions to this rule will very often be found in cases of men who, though thoroughly given up to dissipation, have great determination of character, and if they once say: "I will quit drinking and smoking," it is done.

Occasionally, a man will be selected, of immense frame and great physical power, with weak and vacillating mind, who will either "blow hot or cold," as the fancy strikes him. It will be best not to place very much reliance upon him, as he is just as likely as not, at the last moment, to throw off all restraint, and declare, emphatically, that he "won't" do so and so. The amount of vigilance required to keep him out of mischief will scarcely be repaid.

Idleness and dissipation, in his case, have either led to a dislike for exercise, or are produced for want of it. But if

the trainer decides to undertake the care and preparation of such a candidate, he must proceed cautiously and gradually, both as to diet and exercise. The person selected may be a good natured agreeable man, who was led into his vicious course by some one else of stronger mind and temperament. He may also be rescued by such an one, if he is willing to spend the time required to get him into trim. It will be necessary to "watch" him continually until he is thoroughly broke in, and the influence and example of those around him begins to tell. The method of curing him of his vicious habits, and the evil consequences that have resulted therefrom, will be similar to that advised in the case of "the man of good cheer." The medicine etc., must be regulated according to the requirements of the case, and after a short season of preparatory training, he will be ready to engage in active work. In a majority of cases, men of these two classes will be found either with a greater abundance of solid flesh than will be convenient to carry in the race, or they will be bloated by liquor. The nature of their indulgences, however, has a good deal to do with this, and some will be found thin, haggard and worn, (in consequence of the long and serious derangement of their digestive systems.) Upon ceasing the use of the exciting agents of this derangement, however, they will generally accumulate flesh and muscle very rapidly. In considering the cases of men of this class, it has been taken for granted that they have an abundance of time to train, and that they are at liberty to devote what time they please to their work.

Another class of men who often require relief from their business are those who have adhered too closely to light

MECHANICAL LABOR.

A great many men whose occupation is in-doors, injure themselves by too close confinement, although the nature of their business may call for considerable bodily exercise. For instance, hat and cap makers work all day, but not in a manner that is calculated to strengthen them very much. The room is generally over heated and poorly ventilated, and never fails to work injury. Men confined in wollen, tobacco, and other factories of similar description, generally suffer from the same causes.

Tailoring and shoemaking, are occupations that are characterised by considerable muscular exertion, especially of the arms, but the cramped position in which the body is confined for so long a time is likely to impede the circulation.

Printers also, though they stand up to the case and exercise the body to a considerable extent, and with a healthy motion, are yet very often sufferers from disease, from cause somewhat similar to those mentioned above. The atmosphere in which they breath, and the exhalations from the type, often produce serious injury, and, as for night-printers, the very nature of their occupation causes a constant wear on the system, which ultimately breaks it down.

Men of this class, who contemplate engaging in a course of training, will almost always find it a very easy task, as their lives have been, for the most part, ones of sobriety. There are, to be sure, many dissipated mechanics, but the most of their time is spent in honest labor, and their constitutions have suffered very little injury from any other causes than those consequent to their business.

In any of the emergencies spoken of hereinbefore, the remedies or mode of treatment laid down may be resorted to. If no special derangement of the system is manifest, a gradual course of exercise is to be commenced and proceeded with, according to circumstances. A morning walk and bath, in the early stages; dumb-bell, and club exercises before dinner, which should be succeeded by a half hours' rest. Between five and six o'clock in the evening, a row of from two to three miles. Then supper and amusement of some kind until bed-time.

This is meant for those who continue their daily avocations at the same time that they are entering their course of exercise; but for those who can temporarily leave off work, a stricter system should be enforced.

Probably sufficient has now been said upon the subject of preparing men for races, who at the same time continue their daily avocations. That is to say, that the method of treating men of different temperaments, and physical conditions, during the preparatory process, has been fully explained. During the course of active training, it is hoped that the crew will be able to relinquish their business duties and devote their whole time to training. At colleges, and places of similar chracter, they are usually enabled to do this.

The following, will constitute what might be termed, the summary of a day's work in Professional Training.

A DAY'S WORK.

Rise between five and six o'clock A. M; five is sufficiently early, and six is the latest allowable. Start on a walk. at

moderate pace, which is to be gradually increased to a run. About two miles and return, will be sufficient at the commencement, and can be increased if possible. Then rub perfectly dry with a coarse towel, and take an ablution with a sponge in cold water.

Breakfast should be taken about one hour and a half after rising, and is to consist of the diet mentioned.

Light reading or exercise, after breakfast for about three hours, when, take the boat, and pull at regular speed for about forty minutes. An hour and a half, or two hours, should intervene between the morning row and dinner, which should be prepared as nearly as possible, in accordance with the directions laid down in this Work.

After dinner, any light exercise will be in order, until between four and five, when the boat is again to be taken, and pulled at about the same pace as in the morning for about one hours' time.

Supper should be eaten at about seven o'clock, after which no more exercise that day, and no more food or drink should be taken, unless where it is absolutely necessary.

The evening should be spent in reading, singing, or any similar amusement.

Retire about three hours and a half after supper to a single bed in a room ventilated and dry.

BREAKFAST.

A majority of trainers formerly considered, and many yet retain the opinion, that oat-meal porridge is far superior to anything else for the morning meal. But to those who en-

tertained an aversion to this diet, which many do, a pint of table beer, home-made, and not too strong, with a liberal allowance of bread, was given. A small quantity of beef or mutton was also allowed.

Oat-meal porridge "is" very good, if agreeable; but where distasteful, I should not certainly recommend the table beer as a substitute, for the reason that beer or liquor of any kind, in active training, is not only not beneficial but positively injurious. Light biscuit or bread, slightly stale, or even dry toast, with broiled beef or mutton, may, in most cases, be accepted as good and safe to be eaten, and not very likely to disgust the partaker.

As a drink, water in small quantities, pure milk, or black tea, which is best taken clear. It is not desirable to stint the appetite, unless very enormous, or where there is a great superabundance of fat, and even then it will, in most cases, be found more advantageous to reduce the weight by work than by starvation.

Broiling the meat is generally recommended, because, by that means less nutriment is lost than by any other mode of cooking, but an occasional roast or fry, will serve to vary the routine, and will do no hurt.

The steak should be kept on the gridiron till properly done through, as the food is thus rendered much more palatable to most persons, and certainly more digestible to all.

Coffee is not generally recommended, nor very generally used, in training, and I will not advise the use of it, though I think that the effects of coffee, when procured whole, well ground and properly cooked, is not by any means as injurious as some would have us believe.

Cocoa is considered too greasy, and not to be compared to tea, which the trainers of a few years ago recommended should be green; black tea, altogether, is the custom now.

Butter, sauces, and spices, should be avoided, and nothing but salt, and a very little pepper, used as a condiment.

The articles above enumerated comprise about all that can be safely recommended for general use at breakfast, but it is, in my opinion, impossible to prescribe what shall and what shall not be taken by all individuals, in all localities, of a country of so varied a climate and temperature as America; and if, upon trial, other and different kinds of food are found to agree with a man, he should use them without stint.

DINNER.

This is the most important meal, and should consist of roast beef or mutton, well-done or rare, according to taste, with occasionally a fowl, excepting such as are rich and greasy, as, for instance, goose or duck. When the meat is ordered well done, it is not meant that it should be burned to a crisp, nor yet that all the juice is to be extracted by cooking, but that it may be so done as to leave as much as possible of the juice in the meat without having it too rare.

It has been said that the meat should be cooked to suit the fancy of the patient, but, in all cases, this would be anything but a safe plan to adopt, as very few persons are

anything like well instructed upon hygiene, in its relations to the culinary art; and of those who are, a large majority prefer rather to satisfy their palates than to follow the dictates of their judgment. In a majority of cases, however, a man's food should be cooked in the manner to which he has been accustomed and prefers.

Salt beef, pork, veal, and most wild fowl, should be avoided. Potatoes must be used sparingly—one or two moderate sized ones will be sufficient at a meal. All other vegetables have heretofore been ruled out, as being improper for a man in training to partake of—but there is no reason why very many of the vegetables that make their appearance in our market should not be moderately used, if properly prepared.

Where the party in training has always been accustomed to eating all the vegetables of the season, no possible harm can result from his indulging with discretion in the use, occasionally, of parsnips, green peas, cauliflower, corn, or even cabbage, in small quantity.

But if used, it should be without vinegar or spices. Bread, at this meal, as at all times, is to be used "ad libitum," or in lieu thereof, light biscuit or crackers, as it is good to change off. As a drink, water, tea, or milk may be used. If tea is taken, it should be black, and not too strong. If milk, it should be fresh and pure, and whatever is used should be partaken of in small quantities, perhaps not more than one cup or glassful.

It was formerly the custom to give at this meal, from a pint to a quart of home brewed ale, claret, or sherry and water.

Fish has been seldom prescribed as an article of diet to

those in training, although no objection exists to the use of many of the different species of fish that abound in our fresh water lakes and rivers. It would be difficult to mention any particular fish that is to be had in all localities of the country, but fresh whitefish, when it can be obtained, makes a very agreeable relish, and if moderately used, will be very good food.

In any case, whatever is used should not be continued too long without a change, as nothing so thoroughly disorders the digestive functions, as sticking too closely to one kind of food.

This should be constantly borne in mind by the trainer, as there is no reason why he should confine himself to any particular articles.

As a desert, he may allow every third day a pudding composed of either tapioca, farina or cornstarch, or a common bread pudding, not too heavy, will be as good as anything else. This served up with green currants, blackberries or gooseberries, will be by no means disagreeable to the palate, or unwholesome to the stomach. While allowing this pudding, it is meant that it shall be prepared lightly, and that it, as well as the preserve sauce, shall be used with discretion. The main article of diet at dinner, in moderately warm climates, should, as a matter of course, be beef or mutton, with bread, but as it would be next to impossible for any person to train on these articles alone, those above mentioned have been prescribed for judicious use as auxiliaries.

SUPPER.

The trainers of a few years ago, or many of them at least, maintained that no supper should be eaten by a party in training, but experience has proved that unless the training is of so long duration as to thoroughly accustom the stomach to the long fast from dinner to the next morning, it is much better to allow a light meal in the evening.

For this meal, oatmeal porridge is perhaps the best thing to use, with dry toast. A soft boiled egg may be taken every second or third night, without pepper or salt. Meat is not necessary at night, except for persons of very delicate constitution, who may require unusual support. For such persons a small steak and a little fried potato may be prepared; taking care to broil the steak, and not to use grease with the potatoes.

For those who are not obliged to use meat, a little cranberry sauce, not too sweet, may be taken on their bread in conjunction with the porridge. When in season, blackberries and stawberries may be allowed, in small quantities, but not unless perfectly sound and fresh, as otherwise a sour stomach would be likely to result. As at the two previous meals, water, milk or tea, may be taken in moderation. After this meal nothing more should be taken until the following morning, unless in cases where extreme thirst is felt, which can best be allayed by a drink of cool water or milk.

The trainer requires great skill and experience to enable him to bring out his crew in proper condition, without either overworking them or leaving them "slack." All should be so trained as to be able to perform an equal amount of work,

as nothing is so likely to work harm to a crew as difference of condition among its members. If one man pegs out early in the race, some one else has got to do his share of the work, or at least try to do it, and thus run the risk of over exerting or straining himself, whilst the inevitable result of such a states of things will be that either "starboard" or "port," as the case may be, will pull round.

And so you have unequal and homely rowing, beside losing the contest. Hence, in order to have the crew uniformly and properly trained, care should be taken not to "stint" beyond reason, those who may have been accustomed to liberal diet, nor to allow anything more than what is herein prescribed to those who "train well."

If, for instance, the habit is gross, and the appetite good, it will be necessary to allow only the plainest food, and to vary it a very little.

By this precaution, enough and not too much, is sure to be taken, and the amount of work will ensure its digestion.

If, on the other hand, the constitution is delicate, with a want of appetite, want of digestion, and too great a loss of flesh, it is desirable to allow as much change as possible.

Some persons are purged by oatmeal, and, as a matter of course, should avoid porridge, with others, all the bread should be toasted to prevent diarrhœa, whilst with some, when constipation is present, coarse brown bread, made from the genuine undressed flour, is a good remedy for that troublesome evil. Hot bread, or biscuit, should never be eaten, but fresh bread is always allowable. Graham bread, for persons whose bowels are not regular, will be an excel-

lent article of diet. For mutton chops, the best part is the leg of a two or three year old wether; for steaks, the inside of a sirloin.

In the early days of practice, and in the race itself, great distress sometimes occurs; there is considerable blueness of face from congestion, and the breathing is labored and difficult. The best remedy for this state is a little brandy and water and good friction on the feet, legs, and thighs, or, if it still persists, a warm bath at ninety-eight degrees.

REDUCING WEIGHT.

Superfluous flesh is something which must, as a matter of course, be got rid of before a man will be in condition to enter a race. To this end, various means are used, all of which, however, produce sweating, by which the weight is to be reduced. Corpulent persons, in training, should not make use of fat-producing food, as it would be impossible to produce good condition by sweating to reduce weight, while at the same time the quality of food eaten, tends to an accumulation of flesh. Milk, fresh bread, and butter, should be used cautiously, and, perhaps, not to use butter at all, would be the better plan.

It is not desirable to dose a man with medicine, while in training, any more than at any other time, but much good can be often and rapidly accomplished by the aid of a little potent medicine, judiciously administered. If no evidence of organic derangement presents itself, there will, of course, be no necessity for using medicine, but if such derangement does exist, the better way will be to use a little

medicine. If there is torpid liver, a blue pill might be taken before retiring at night, and a couple of seidlitz powders, or a bottle of magnesia in the morning. If this does not effect the desired object, castor oil, or salts and senna may be used.

This should be continued, at intervals of two or three days, until the liver resumes a healthy action. More than one dose will seldom be required, and this will surely prove beneficial, by cleansing the stomach and intestines. Fatty deposits around the heart, lungs, etc., interfere with a healthy action of these organs, and are, of course, to be removed.

The muscles also suffer an impediment from this cause, and the whole frame has an additional deadweight to carry. The sweating process comprises natural, artificial and medicinal sweating.

NATURAL SWEATING

Is produced by encasing the portions which it is desired to reduce, in heavy flannels. If the neck and chest are plethoric, three or four under shirts may be put on, and a comforter or shawl wound round the neck. If the abdomen is corpulent, fasten several thicknesses of flannel in front of it, by means of one or two belts passed around the body. If it is desired to reduce the amount of fat upon the legs, draw on two or three pair of drawers or pantaloons.

When all is ready, the party should start at a moderate pace, and increase to a dog-trot, which is to be kept up for about forty minutes, when the party should return to the

house and lie down with all his clothes on, between two feather beds or several heavy blankets, for twenty or thirty minutes. Then get up and remove, first the clothing from the upper part of the body, and then from the lower limbs. Sponge well with hot brine, and rub down with coarse towel or flesh gloves, after which dress rapidly, so as to run no risk of catching cold. This system of natural sweating is more beneficial than any other.

ARTIFICIAL SWEATING.

This mode of reducing weight has been, for a great many years, resorted to by certain practitioners, and is effected by wrapping the body in a sheet which has previously been soaked in cold water, afterwards putting on a flannel or woolen gown, outside of which again a heavy blanket or shawl. Then place the patient beneath a feather bed or heap of clothes, leaving the mouth uncovered. From twenty to thirty minutes produces a reaction, and bathes the whole body in perspiration. This is to be kept up for about fifty minutes, when the party should remove all the clothing and take one plunge in cold water, if convenient, or if not, make use of a sponge, rub dry, with crash towel, rapidly, and don the clothing. This method is usually preferred by the men, as it increases the flow of spirit, and imparts a "corkiness" to the frame, which is foreign to any other methed. The principal draw back to it is, that with many persons it produces boils, which are usually constant enough in training, from unavoidable causes, and not at all to be encouraged where it is possible to avoid them.

SWEATING BY MEDICINE

Is very popular, with some men, and is produced by taking wine of antimony, sweet spirits nitre, or Dovers' powder.

Medicinial agents, such as those, however, weaken the body to such an extent as to make them inadmissable, and therefore not to be recommended.

AMATEUR TRAINING.

By Amateur Training is meant those who follow a system of training without the aid or instruction of a Professional Trainer.

A great many of the gentlemen amateurs of to-day, have not the time to spare that is required to carry out a complete and systematic course of training. Many, and perhaps, a large majority of the members of the leading amateur Boat Clubs of America, are engaged in business during the very hours which could be the most advantageously devoted to training; and it has always been and still is, a moot question with them, how to get into good condition for a race, without neglecting their business duties.

To all such, I will endeavor to give, in as correct detail as possible, snch instructions for amateur easy training, as will not certainly make them the equals of perfectly trained professional oarsmen, but of those of their own kind, against whom only, if they have any sense, they will try to contend. If the members of the crew be mechanics, or clerks, or dependents of any kind, their hours of business will not, it is to be supposed, be longer than from seven till seven; or

if any person chosen for the crew has to work more hours than these, he had better either step out of the crew, or else out of his situation, for if he attempts to fullfil his business obligations, and at the same time his duty, as one of a racing crew—one or other, his business or his boating, will be sure to suffer.

In most of the Northern States and Provinces, there is a winter, generally a long one, which affords an excellent opportunity for persons to keep themselves in good healthy condition and a state of muscular development, by frequent use of the dumb-bells, the horizontal bar, and Indian clubs. Winter offers this excellent opportunity, because at that time of year, out-door sports, excepting those connected with the ice, are laid on the shelf; and one who has been confined during the day to business, will take hold of the clubs with more pleasure and gusto than he would on a summer evening, after having worked all day in a heated office, and walked the dusty streets, becoming exhausted and unfit for work.

Besides this, during cold weather, more animal food, which is the fuel of the body is eaten, which, taken in connection with a walk home on a bracing winter evening, produces an almost irresistible inclination to exercise, that is in direct opposition to the feeling of lassitude almost universally present in extremly hot weather. Therefore, all men who expect to achieve any success with the oar, should be regular in their physical exercise during the winter months; if tobacco and liquor are discarded it will be so much the better.

If a gymnasium is accessible, by all means it should be resorted to, as here apparatus may be found suited to the development of every portion of the frame. The body should be gradually and cautiously strengthened by judicious

exercise, until in such condition as to preclude, as far as possible, the danger of injuring ones' self from over exertion; the clubs, bells and bars, should be mainly used as the instruments best calculated to develop the muscular portion of the body that is most actively engaged in rowing.

If opportunity is had in the gymnasium or elsewhere within shelter, to indulge in a regular morning run, it should be taken advantage of, as this will contribute greatly to the maintenance of health, and also facilitate every move towards getting into good condition for the summer work. The gymnastic exercises, if properly carried out, will be all that is necessary to keep the body in a healthy and vigorous condition during the winter; and, the individual will accordingly have not more than one half as much labor to perform, in getting into training condition, when the season opens, as the man who, at the close of the last season, left off all active bodily exercise, and at the same time gave himself up to a liberal indulgence in tobacco and spirituous stimulants. As to the time at which gymnastic exercises can be engaged in with the most advantage—the evening—that is to say, commencing not sooner than one hour after the evening meal, has, in a great majority of cases, proved the most suitable and comfortable, and very fortunately, also, the most convenient. However, if a man's business hours are such as to give him leisure from four to six P. M., he will certainly derive great benefit by devoting that time, or a part of it, to bodily exercise.

As soon as the weather is sufficiently pleasant to allow of the morning run being taken in the open air, it should be done. But while the morning air is so sharp and frosty as to produce labored respiration and oppression of the lungs,

no good, but serious consequences, might result. The distance to be gone over should, of course, be gradually increased from day to day, as also the pace. I am well satisfied, from actual observation, that a crew can put themselves in as good condition, as men claiming to be amateurs ought to expect or desire, and yet neither neglect, in the least, their business, or incur anything but a nominal expense. All clubs of any consequence occupy club houses, either good, bad or indifferent, in which the members meet for club purposes.

Naturally enough, a crew training in a city in which one man lives here, another there, and a third somewhere else, meet, during the time they are in training, at the house to do their crew work together, or at least they do, if their captain is a capable man, and is resolved to see that all hands "fill the bill."

Every man, upon rising in the morning, takes his bath; and, if nothing more elaborate, in the way of a bath-tub, is to be had, a common wash-tub will answer the purpose, although it may not be quite so rapid or effective a means as a large one, or a shower bath, still it will do. Having then thoroughly drenched himself with water, he commences the rubbing down process, and certainly the implements made use of for this purpose need not be vainly wished for, on account of cost. This completed, he gets into his flannels, and taking a second suit of flannel in a bundle under his arm, walks briskly to the boat house, or other place of rendezvous; where, if all parties are on time, the morning run commences. If any delay is experienced from tardiness on the part of the crew, or other cause, he should keep moving briskly about until the start is made. As a matter of course the captain of the crew will prescribe the length and speed of the run.

All being in readiness, the Captain calls his men to commence the walk, and the candidate, taking his place, throws his shoulders back, his head well up, and steps out gracefully and buoyantly, at a moderately rapid walk. In the beginning of training, the pace should not be very rapid, but in the middle and latter stages, after becoming well warmed up, the pace is quickened to a dog-trot, which again is doubled, and so on until the "speed" is reached; the men always maintaining an erect posture, so that the organs of respiration may have full play; breathing as much as possible through the nose. The fastest time is made on the "home stretch," and the party should come home at a rattling pace. The boat house reached, the man or men enter, and getting where there is no draught, immediately remove their outer clothing, after which the flannel shirt, which is of course wet with perspiration, is removed and the chest, back, and shoulders, rubbed perfectly dry with a good coarse towel. The drawers and stockings are then removed, and the legs and feet rubbed in the same manner, and the dry flannels are donned, after which the party, taking his wet flannels under his arm, starts for home, where he hangs them up to dry, and thus has them ready for the next morning. He is then ready for breakfast, which should be prepared, as indeed so also should all his meals, as nearly in accordance with the dietary rules hereinbefore contained, as circumstances will permit. That the breakfast will be well relished and well digested, it is not necessary to say, and that he will go to the business of the day feeling every inch a man, all who have tried it know.

After breakfast he proceeds to business, which, in a majority of cases is not forsaken until close on to the dinner hour.

Before partaking of the noon day meal, he should indulge in a ten or fifteen minute "pull" with the clubs or dumb-bells which will serve as an appetizer.

The dinner, which it is to be presumed will be simple, plain, and as nearly as possible what is prescribed in this work, should be well masticated; after this a "siesta" of fifteen or twenty minutes will prove beneficial, as serving to help on the digestive process, by keeping the mind momentarily at rest, as well as the body. In all cases where the distance is not too great, the party should walk to and from meals, as all the out-door walking possible should be had during the day. It is, of course, very seldom that a crew of amateurs can be found, who can obtain sufficient time to pull in the afternoon, but where such time can be obtained, it will be one step nearer to a perfect system of training, and should certainly be made use of.

If an afternoon pull is practicable, it may be taken almost any time, from two to five, but after five, I should not advise a crew of men, who have been engaged during the day in business, to pull before supper, as any time after five o'clock, the system is about preparing to receive the evening meal to which it has been accustomed, and is not in fit condition to sustain so liberal a draught upon its muscular power, as that made in a pull of forty or fifty minutes.

The afternoon pull, then, if taken at all, should be had within at least an hour before the accustomed time for supper, or else deferred until after that meal.

The candidate can usually manage to arrive home a half hour before supper time, and if he does this, and devotes this time to exercise with the clubs and bells, he has thus

far been a good boy, and is entitled to a light supper, according to our rules.

After having eaten his supper, he should rest, say read, for fifteen minutes, and then start at a comfortable gait, for the boat house.

If perspiring, he should sit down and cool off, before taking off his coat to get into the boat, as going out upon the river or lake, he must inevitably catch cold, if in such a condition. Having taken his place in the boat, he follows the directions laid down in regard to rowing, as well as those of the Coxswain or Captain of the crew.

If the crew pull "bare"—that is naked to the waist—they will certainly pull rapidly, and not rest upon the water, exposed to any draughts or currents of air, but where shirts are worn, many labor under the delusion that they can lay upon their oars with impunity, for any length of time, even though their thin shirts be dripping wet and their heads bare.

It would scarcely seem necessary to say anything here in regard to such conduct, more than to condemn it as courting danger which might easily be avoided; and yet there are so many who pursue this course, either through total want of common sense, or for some incomprehensible reason that I feel justified in cautioning all persons who have any regard for their health, to give no encouragement to such a system, by pulling in a crew which follows it up.

If any rests are made, they should be but momentary, and not long enough to incur any danger. As a matter of course, such rests will be necessary, as, otherwise, the weariness occasioned by long and severe pulling, prevents a crew from noticing and correcting faults in their style,

which they otherwise would. During the pull, no water or liquid of any kind, should be taken, but when thirst exists, the mouth may be rinsed with water, as well as the hands, wrists and joints generally, which will act beneficially on the whole system, and prevent the evil consequences which are so apt to follow the free use of cool liquid, while the body is in a perspiration.

Neither should anything be taken before going, or after coming home, which is so often done by our amateurs, but as soon as the boat and oars are housed, the party should walk leisurely home, and retire, at the latest, by eleven o'clock, in a well ventilated and dry room, and where convenient, sleep in a single bed.

Here, as nearly as possible, are all the directions that are necessary to enable an amateur crew to carry out a course of training which will put them, as I before said, in as good condition, if properly observed, as amateurs need expect or desire.

But the most practiced or intelligent trainer will utterly fail, in his endeavors to put a crew into good condition, unless each individual member of that crew, observes what rules are laid down for his guidance. And here, indeed, lies the great trouble to be avoided, viz: Getting men into the crew who are not "honest." By this, I mean those who will, if appointed, accept a position in a boat's crew, promising obedience to orders, and all that, but who will unscrupulously violate what they know to be essential work, if they deem detection unlikely. This is the great danger in training crews in cities where, oftentimes, each member does all but the pulling by himself.

By all means, the crew should be kept, as much as pos-

sible under the surveilance of the Captain, who should be a man of good judgment and experience, and one who will occasionally "test" his men, by one means or another, in order to detect any defects in them likely to lessen their chances of winning.

The importance of observing the rules of training should be impressed upon all candidates for the position of oarsman in a racing crew, as flunking, or soldiering, has more than once spoiled a race for what was, in reality, the best crew.

DIGESTIBILITY OF FOOD.

KIND OF FOOD.	HOW PREPARED.	AM'T OF NUTRIM'T.	TIME TO DIGEST.
Cucumbers,	Raw,	2 per ct.	3.30
Turnips,	Boiled,	4 "	2.15
Milk,	Fresh,	7 "	4.30
Cabbage,	Boiled,	7 "	1.50
Apples.	Raw,	10 "	2.30
Potatoes,	Boiled,	13 "	2.00
Fish,	Broiled,	20 "	1.30
Venison,	"	22 "	5.15
Pork,	Roasted,	24 "	4.00
Veal,	"	25 "	3.30
Beef,	"	26 "	2.45
Poultry,	"	27 "	3.15
Mutton,	"	30 "	3.30
Wheat bread,	Baked,	80 "	3.30
Corn "	"	80 "	2.30
Beans,	Boiled,	87 "	1.30
Rice,		88 "	1.00
Butter and Oils,		96 "	3.30
Sugars and Syrups,		96 "	3.30

(Digestibility of Food—Continued.)

KIND OF FOOD.	HOW PREPARED.	TIME TO DIGEST.
Pigs' Feet,	Soused,	1.00
Tripe,	"	1.00
Eggs—whipped,	Raw,	1.30
Trout—salmon—fresh,	Boiled,	1.30
" " "	Fried,	1.30
Sago,	Boiled,	1.45
Tapioca,	"	2.00
Mutton—fresh,	Broiled,	3.00
Corn-Cake,	Baked,	3.00
Pork Steak,	Broiled,	3.15
Mutton—fresh,	Roasted,	3.15
Bread—wheat,	Fresh-bak'd.	3.30
Eggs—fresh,	Hard-boiled.	3.30
Beef,	Fried	4.00
Veal—fresh,	Broiled,	4.00
Fowls—domestic,	Roasted,	4.00
Beef—old hard salted,	Boiled,	4.15
Ducks—wild,	Roasted,	4.30
Cabbage,	Boiled,	4.30
Pork—fat and lean,	Roasted,	5.15
Bread—wheat,	Baked,	3.30
Liver—beef, fresh,	Broiled,	2.00
Eggs—raw, "	Broiled,	2.00
Cabbage—raw,	Vinegar,	2.00
Milk,	Raw,	2.15
Milk,	Boiled,	2.00
Eggs—fresh,	Roasted,	2.15

(Digestibility of Food—Continued.)

KIND OF FOOD.	HOW PREPARED.	TIME TO DIGEST.
Turkey—wild, . .	Roasted, .	2.15
Turkey—tame, . .	Boiled, .	2.25
Turkey—tame, . .	Roasted, .	2.30
Goose—wild, . .	Roasted, .	2.30
Lamb—fresh, . .	Broiled, .	2.30
Parsnips, . . .	Boiled, .	2.30
Potatoes, . . .	Roasted, .	2.30
Cabbage—head, .	Raw, . .	2.30
Chicken—full-grown,	Fricasseed, .	2.45
Beef—with salt only,	Boiled, . .	2.45
Eggs—fresh, . .	Boiled salt, .	3.00
Bass—striped, fresh,	Boiled, .	3.00
Beef—fresh, lean,	Rare-Roasted	3.00

TROUBLES IN TRAINING.

BOILS.

The process of training, drives out all the impurities from the system, and in so doing develops what are called boils. These result from decomposition of cellular membrane and inflammation beneath the surface of the cuticle. The decomposed portion has to slough off, and seems to exert a poisonous influence on surrounding parts, which interferes with the process of absorption, and creates a circle of red callous skin, usually painful, around the dead part.

In most cases the boil remains stationary for some time, and if it becomes thick, impedes the circulation in the interior of the circle.

The best mode of removing these is either to divide them with a knife, or to apply a stimulating poultice, of a greasy nature, like flaxseed. This produces a healthy suppuration and granulation, and causes a renewal of the part.

But the sensitiveness of the part affected, is usually so great as to make it almost impossible to use the knife, and where this is the case, a mercurial and opiate plaster spread on leather should be used.

The combined effect of this is to stimulate and relieve, but

a removal of the cause—that is a temporary cessation of work, will be necessary to effect a cure. For those who are subject to boils, fifteen grains nitrate silver dissolved in one ounce of water, will often prove a good preventive. This should be painted over the part predisposed to boils, every night. It blackens the skin but will cause no unpleasantness.

CHAPPING.

Men who pull early and late in the season often experience inconvenience from this affection in hands or feet.

The remedies for this are very numerous and commonly known. A mixture of glycerine and honey is infallible, or the glycerine alone will generally prove effective.

The mode of application is to simply rub the glycerine over the part troubled, and leave it on over night.

BLISTERS OR WATER BOILS.

These usually occur from getting the hands wet, or are to be found upon palms that are soft and unused to hard labor. If the blister bursts of itself, collodion should be applied with a brush, if the party does not object to the pain. This should be renewed about three times a day until the skin is sufficiently tough to cease its use. I have seen one of these little jokers, neglected, assume large proportions, and prevent the use of the hand for some time. When the collodion causes too much pain, apply a thin layer of medicated cotton under a kid glove, or if preferred, very finely pulverized gum arabic; of course, it is best not to row while the hand is

tender from blisters, but if it becomes absolutely necessary, a glove should be temporarily worn, no matter what the remedy used. The hands should not be wet or washed for twenty-four hours after the application of any remedy. When a blister forms, and before it comes to a head, or bursts, it should be pricked with a needle, and pressed, and this should be repeated as often as the blister forms. This excludes the air and allows time for the scarf skin to form.

TRAINING NOT INJURIOUS.

It has been stated that a shattered constitution and loss of health, is often the lot of those who follow a systematic course of training, for athletic exercises, of one kind or another, and that it is invariably so when training is persevered in for a number of years.

For myself, I never believed this to be the case, but incline to the opinion that many who make this statement have been led to do so, from seeing, or hearing of persons who were "said" to have been injured, either while training for, or engaged in, some athletic contest.

It is not difficult to understand how a person of delicate, or for that matter even the most robust constitution, may injure himself in training, if not very careful.

For instance, if after having taken his morning run and arrived home in a state of profuse perspiration, he stands exposed to a draught while changing his flannels, it is not to be wondered at, that in the course of a few weeks he is heard hacking and coughing.

Yet this fact, even if known, will seldom be mentioned, when his friends are telling how he lost health in training for a boat-race.

Or again if the party starts for a run on a cool, frosty morning and is so taken with the "bracing" character of the atmosphere, as to put in his "loudest" for a couple of miles, he need not wonder if he shall even raise a little blood at the finish; but all this does not prove that training is in any way injurious, but merely that the candidate himself has not been judicious in his practice.

But is not this same thing happening every day in the year, to persons engaged in every imaginable pursuit? Do not all classes of persons expose themselves daily, in the most reckless manner while engaged in business, and pleasures of various kinds? And the result of this exposure can be seen in the mortuary reports of the various cities.

But it may be said that the oldest and most experienced of our athletes and trainers, have deteriorated and waxed weak, while yet young. I know of no instance of the kind, and do not believe that any such case exists. That is to say, I do not believe that any man ever lost strength of body or mind, from having trained too often for contests, where such course of training was not followed by a course of dissipation, or where disease was not contracted by careless exposure. The idea that because a man is brought somewhat nearer to a state of physical perfection, by what is styled "artificial" means, than he usually is in, he must, upon ceasing the use of those means, or continuing to use them beyond a certain time, suffer a decrease of physical power proportioned to the increase obtained thereby, is ridiculous

But here is what an eminent physiologist says upon the subject: "The ordinary belief that the athletic constitution cannot be long maintained, appears to have no foundation; nor does it appear that any ultimate injury results

from the system being persevered in for some time. That trained men often fall into bad health on the cessation of the plan, is probably owing in part to the intemperance and other bad habits, of the class usually subjected to this discipline. The effects of trainers' regimen are hardness and firmness of the muscles, clearness of the skin, capability of bearing continued severe exercise, and a feeling of freedom and lightness, (or 'corkiness,') in the limbs. During the continuance of the system, it is found that the body recovers, with wonderful facility, from the effects of injuries; wounds heal very rapidly; and cutaneous eruptions usually disappear.

Clearness and vigor of mind, also, are stated to be the results of this plan; and it is probable that where persevering attention and intense application are necessary, a modification of this system, in which due allowance should be made for the diminished quantity of exercise, would be found advantageous. The method of training employed by Jackson, a celebrated trainer of prize-fighters, as deduced from his answers to questions put to him by John Bell, was, to begin on a clear foundation, by an emetic and two or three purges.

Beef and mutton, the lean of fat meat being preferred, constituted the chief food. Veal, lamb, and pork, were said to be less digestible, ('the last purges some men.'")

Fish was said to be "a watery kind of diet," and employed only by jockeys, who wished to reduce weight by sweating. Stale bread was the only vegetable food allowed. The quantity of fluid permitted was 3 1-2 pints per diem; but fermented liquors were strictly forbidden. Two full meals, with a light supper, were usually taken. The quan-

tity of exercise employed, was very considerable, and such as few men of ordinary strength could endure. This account corresponds very much with that which Hunter gave of the North American Indians, when about to set out on a long march."

Many other authorities might be quoted to the same effect, were it deemed necessary, but it is not, in my opinion, as every one likely to enter upon active training, will know enough to take care of himself then, as well as at any other time.

No one need ever refrain from fear of injury, from going into training, because he has trained so many times before, as injury resulting merely from continuous or successive training, is beyond a possibility.

Miscellaneous.

BOAT-BUILDING, BIOGRAPHICAL SKETCHES,
RACING RULES, DICTIONARY
OF TERMS, ETC.

BOAT-BUILDING.

SINGLE SCULL BOATS.

American Shells, now-a-days, are generally made of Spanish cedar, built with one plank on a side, without laps. The plank is usually an eighth and a sixteenth of an inch in thickness, so that it will bend easily; about five inches high forward, and four inches aft.

In the middle, where the man sits, there is a washboard about five inches deep, so that the place for the rower is about ten inches deep.

The frame of the boat is first set up, and the planks afterwards bent on the timbers; the timbers are made of hackmatack, the knees also being from the roots of the hackmatack tree, which is very light and strong.

The boats are covered forward and aft, with muslin, or oil silk or linen, which is then varnished and made watertight.

A DOUBLE SCULL

Is constructed upon the same principles, but a slightly different model, being a little deeper and longer. The length of a single scull race boat is from thirty to thirty-two feet, by twelve or fourteen inches beam; that of a scull boat for practice or pleasure, should be twenty-eight or thirty feet long, by from eighteen to twenty-two inches wide.

A double scull boat should not be less than sixteen inches wide, by from thirty-two to thirty-five feet long; six inches deep forward, five inches deep aft, and eleven inches in the middle, where the rowers sit. The material used for covering a two pair is the same as for a single.

The rowlocks used for single and double scull boats, are made from either three eighths round iron, or three eighths pipe for the braces, and by being galvanized, will keep better from getting rusty. The pipe rowlocks are only one half as heavy as the solid iron ones, and are in every way sufficiently strong.

The solid iron rowlocks cost about five dollars each, the pipe costing double that sum, as it is double the work to make them.

A single or double scull boat should have the rowlocks spread about five feet, to row nine feet six inch sculls, but if the sculls are made light, a man can row with ten feet sculls, and if rowing cross-handed, ten feet four inch-sculls may even be used.

The sculls used now-a-days are made, for the most part, of spruce timber, which is lighter and stronger than pine; and as

for the style, spoon blades are now mostly altogether used as they hold the water better than the plain blade.

When a man pulls cross-handed, he requires a button on his oar to keep it from slipping outboard; this is made of leather, and is secured by nails, and should be put on with a slant or curve, so that there is no jam to the oar in reaching.

FOUR-OARED BOATS.

Four-oared Racing Shells are from nineteen to twenty-two inches wide, seven inches deep forward, and six inches deep aft, and thirty-five to forty feet long, with a wash-board where the rowers sit.

The outriggers on a four, are about twenty inches outboard, are made of one half-inch round iron or one-half inch pipe, the rowlocks costing, solid, five, and pipe ten dollars each.

A SIX OAR

Is from nineteen to twenty-two inches wide, and from forty-five to fifty-two feet long, seven and a half inches deep forward, and six and a half aft, and about twelve inches deep amidship, where the oarsmen sit.

The rowlocks are the same as in a four, and the oars now used are mostly spoon fashion, and should be in fours and sixes, about twelve and a half to thirteen feet long.

Shell boats are sometimes manufactured on a large model, and called clinker-built, or lapstreak shells, but they are heavier than a smooth work shell, and not so fast.

A WHITEHALL BOAT

Is a smooth work boat, nineteen feet long, pulling four oars or two pair sculls, with oak timbers, planked with about six inch boards, oak keel and caulked seams, and oak gunwale.

A lapstreak, or clinker-built boat is made of boards, six inch wide, planked six on a side, the timbers being put in after the boat is planked up.

There is no such boat in this country as an in-rigged; if they are not out-rigged, they are what is correctly termed gunwale rigged, with thowle pins through the gunwale.

They sometimes make an outrigger out of bent wood, but it takes almost as much iron to brace the wood, as to make it of iron entire.

Lapstreak and Whitehall boats are made of oak and white cedar, the shells being made of Spanish cedar and hackmatack.

Ash oars and sculls are cheaper than spruce, on account of having a plain blade, which enables them to be made by machinery, while the spruce spoon blade has to be made of heavy timber, dug out by hand.

A beginner who will learn to row with spoon sculls, will become so much attached to them as never to change.

PAPER BOATS.

Among the many peculiarly American ideas, so prevalent at the present time, the very Yankee notion of constructing boats out of paper, is deserving of special notice, as bearing particularly upon the subject matter of this work. Many who will read this book will hear, for the first time, that there is established in this country a large manufactory, which has been in successful operation about three years, and which turns out annually, large numbers of beautifully finished pleasure and racing boats, of all sizes. But such is the case, and the favor with which these boats are received by the oarsmen of America, would seem to indicate that they will finally be universally adopted, not only by Boat Clubs, for racing purposes, but by sportsmen, for hunting and fishing, and by the proprietors of watering places for pleasure rowing.

In order that those of my readers who have never seen, or heard of these boats, if any there be, may comprehend their mode of construction and availability for different purposes, I will give a short description of the means by which boats are constructed out of paper.

In 1867, Mr. Geo. A. Waters, while experimenting with paper, conceived the idea of so preparing it, that it could be moulded over forms in single sheets, so as to make a very strong, durable, and useful boat. In 1868, he and his father, Mr. Elisha Waters, of Troy, New York, took out patents for this purpose, in the United States and England. Soon afterwards, a company was formed under the name of Waters, Balch & Co., consisting of Mr. Elisha Waters, Col. Geo. T. Balch, late of the U. S. Ordnance Department, and the two sons of Mr. Waters, for the manufacture of paper boats, of every description.

The manufactory is situated on the banks of the Hudson River, about a mile above the City of Troy, near the State Dam. The slack-water created by this dam extends back nearly five miles, making one of the finest boating courses in the country. Over this course every boat is tested by the Boat Club composed of Mr. Waters and his workmen, who have become experts in their handsome shell, in which they exercise every week. Great improvements have been recently made in the preparation of the paper, which enables the manufacturers to prepare the sheets of any required size and thickness suitable for a great variety of boats, while it is absolutely impervious to the action of water, and much stronger, lighter, and tougher, than any wood.

The method of designing and modeling paper boats, requires high mathematical knowledge and rare mechanical skill, to secure the proper lines and proportions, and balance, for carrying.

The paper sheets are moulded over wooden forms, in a moist state, and when dried, are taken off in a single piece, without joint or seam on either outer or inner surface, and

thus causing the least possible friction, for easy and rapid passage through the water. The skin and decks are made of the strongest paper which can be manufactured, moulded into the model desired on solid forms of wood, the exact shape and size of the required boat; supported and kept in shape by a framework of light wood, and finished up with fittings of wood and metal in the usual manner. The paper skin is finished with hard varnishes, and presents a solid, horny and perfectly smooth surface to the action of the water, unbroken by joint, lap, or seam from stem to stern. This surface can be polished as smooth as a mirror, if desired; it cannot be cracked or split like wood, no ordinary degree of heat or cold affects its shape or hardness; hence these boats are admirably adapted for use in all climates.

All the shell boats are provided with compartments in the fore and after bodies, which are strictly air and water-tight: these increase the buoyancy of the boat; the cockpit is only large enough to accomodate the load, and hence can ship but little water. The boats preserve their rigidity and shape, and retain their original underwater lines more perfectly than any shell boats ever made, and they gain no weight by use. The kind of material used for the skin of the boat, enables the manufacturers to produce underwater lines which cannot be produced in wooden shells, except they be worked out of the solid wood, and even where this is practicable, it is found almost impossible to keep such lines in their original form for any length of time.

The experience of over three years, and the constant improvements which the manufacturers have been making in their work, has enabled them to overcome the objections made to some of their first boats, and to add a finish of construction

which all oarsmen will appreciate. In their shells they pay particular attention to the perfect air and water-tightness of the compartments; to the convenient and firm adjustment of the foot braces which is a great point in itself, and to the stiffness of the hulls in boats of light weight. The gigs and canoes for fishing and travelling are built after the best models used at the North and South, and form a distinctive feature of their business.

For the construction of hunting or fishing boats, a light and strong frame of wood is prepared, composed of from ten to fifteen pair of ribs and suitable stem and stern pieces, cut from the natural crooks of hackmatack roots. These are firmly framed to two gunwales, each composed of a single piece of clear spruce, and to a pine kelson extending the length of the floor of the boat, the whole forming, when in position, the skeleton shape of the desired model.

Over this frame, and inseperably attached to it, is stretched a paper skin, from an eighth to three-sixteenths of an inch thick, made from new, unbleached linen stock. This paper is made impervious to water, and then covered inside and outside with a hard elastic varnish, presenting to the water, a surface so smooth that the friction, when the boat is in motion, is the very least attainable. The stem and stern posts are protected by galvanized iron or brass, and beckets are attached, by which the boat may be drawn in either direction. Strips are attached to the bottom to protect it from wear in hauling it upon shore, and wale strips of ash protect the upper edges from wear or abrasion.

These boats are so constructed as to afford great roominess to a hunter for stowing his traps, steadiness, safety and speed. The wooden boats, after which these have been

modeled, have been in use for over ten years, and are pronounced by the first hunters in the country, the best sporting boats manufactured from wood, and excelled only by those manufactured of paper.

With fishing and hunting, however, we have nothing to do, and this department of the business has only been passingly mentioned, as showing the variety of craft manufactured by this firm. To presume that wooden boats are to be done away with in a year, would be unreasonable, as time is required to work such a change as the total abolition of wooden racing and pleasure boats, but if any evidence is wanted to show that Paper Boats are every day gaining popularity, it can be found by referring to the accounts of prominent races pulled during the past three years, in a majority of which paper boats were used by the most noted crews and oarsmen, both professional and amateur. They were pulled by the winners of fourteen matched races, in 1868, twenty-six match races during the season of 1869, (their second year in use,) and fifty in 1870—and they are to be found dotting many a lake and river, from Maine to Mexico. It has been said by some prominent American oarsmen, who are prejudiced against this class of boats, that they are a fraud, a failure, and what not, and that they never can compete with wooden boats, etc., etc., but the records of the races belie these assertions, and certainly the manufacturers would never have gone into the business on the scale they have, and invested money to the extent they have, unless they were fully confident that they could contend successfully with the builders of wooden boats. The prices of these boats have suffered a reduction every year, and when they shall be so low as to place

a favorable difference in price between them and wooden boats, it will be demonstrated to the satisfaction of all, that they merit everything that is claimed for them.

All who have been connected with boat clubs know that they suffer very often from pecuniary embarrassment, and naturally enough, an organization which has scarcely more than sufficient money in the treasury to purchase a boat, will be shy of risking its corporate existence on a paper boat, of which they perhaps know nothing, when for the same money they can buy a cedar shell modeled after those that have been in use for years.

But time will demonstrate the superiority of Paper Boats over wooden ones, as it did the superiority of the steam engine over the stage coach, although we do not mean this as a comparison of speed between the wooden and paper boats. Before leaving this subject of paper boats, I will call the special attention of the reader to the annexed letter from Annapolis, which is in reply to a letter of inquiry (written by me) to its author, who is a gentleman of the highest veracity, and one for whose word I am personally able to vouch.

ANNAPOLIS, Md., November, 1869.

ROBT. B. JOHNSON:

Dear Sir—Your letter inquiring in regard to Paper Boats is received. * * * * * * *

This class of boats have every advantage over the cedar built shells, while, to my knowledge, not a single objection exists. Their advantages over cedar shells are: By far greater strength; less weight; greater durability; they require hardly any care; never leak, and never warp.

They can be moulded into any shape whatever, to suit the designer's lines, which wooden shells cannot, so that any fineness of both extremities is easily produced. Their great beauty and parlor finish is also not to be overlooked. Our oldest shell is nearly three years old, has seen very rough usage, and is as good as new. The chances are in favor of its lasting another three years. The only expense we have had during this time, is about one dollars' worth of copal varnish, with which we have given her a couple of coatings. At the same time, another Club possessed a wooden shell; she is now nearly broken up with age, (three years' old,) and hardly a foot of her is to be seen that has not been patched in some way or other.

In last year's (1869,) race, our four-oared paper shell beat a "six-oared" cedar shell, by long odds, although the crews were pretty well matched, making the three miles in eighteen minutes thirty-five seconds.

I would regard the purchase of a wooden shell as waste of money. The firm which manufactures Paper Boats (Waters, Balch & Co., of Troy, New York,) also supply splendid oars with their boats. It may be some time before they come into general use, as there is always some prejudice against anything new. The Academy boats are all built to pull without a coxswain, but the manufacturers make them either with or without, just as those ordering them prefer.

But before closing I would say that I advise persons wishing to purchase boats, to get paper ones "by all means."

Yours &c.,

C. P. KUNHARDT,

U. S. Naval Academy.

BIOGRAPHICAL SKETCHES.

HENRY COULTER.

Henry Coulter was born in the thriving village of Manchester, Pa., located about two miles below Pittsburgh, on the northern bank of the Ohio River, in the month of February 1842.

Like Hamill, at an early age, he developed a taste for boating, and many of his leisure hours during boy-hood were spent in endeavoring to become proficient in feathering the spruces. In the summer of 1867, he had acquired so much skill in manipulating the blades, that his friends matched him against Fred Wolfe, in a five mile contest for two hundred and fifty dollars a side. This was to have been decided on August 24th, 1856, but in the interim, Coulter had effected a more desirable match with the veteran, Bill Jackson, and from policy, he paid forfeit to Wolfe. He rowed Jackson, on August 24th, 1867, for five hundred dollars a side, over the lower Monongahela course, and achieved his maiden victory as a single sculler, by beating his opponent four lengths; the time given being 38.20.

This clever performance gained him many backers, and he soon took a leading position in the aquatic world.

Since that time he has pulled in many of the best races in this country, and his name still occupies an enviable position among our professional oarsmen.

Coulter stands five feet eight and one half inches high, and weighs about one hundred and sixty-eight pounds.

JOSH WARD.

Josh was born in the same year with Hamill, and commenced his rowing career about the same time. His birth place was Newburgh, New York.

Josh is a fine specimen of a man, standing perhaps a little better than six feet in height, and races at from one hundred and fifty to one hundred and sixty pounds. His first bid for aquatic honors, was at the age of nineteen, when, with his brother Henry, he pulled a two-pair sculls, in a regatta at his native place, on the 4th of July, 1857, over a four-mile course, the Wards winning in 33.30. From this time until October, 1859, he rowed in some six match races, both as sculler and rower, in most of which he was victorious.

On the 11th of October, 1869, there was a regatta off Staten Island, for a purse of one hundred dollars and the championship, in which were entered Fay, Daw, and Hancon, all good oarsmen.

The course was five miles, with one turn, and Ward pulled a twenty-five foot boat, built by Donohue.

Ward came home a long way ahead, in about the best time ever made, viz: "Thirty-five minutes and ten seconds."

After this race, made in time never yet equaled, Wards'

reputation became wide-spread, and he was looked upon as the best sculler in the United States.

He took part in numerous regattas, at Boston, Poughkeepsie, Pittsburgh, Philadelphia and other places, and achieved a reputation which has made him the pet oarsman of America.

Josh Wards races have been numerous, and his triumphs glorious, and he has a record which he can always refer to with pride. He is a good natured, convivial and thoroughly American Oarsman.

JAMES HAMILL.

James Hamill was born in Pittsburgh, the Smoky City, in 1838, stands about five feet six inches high, and presents a wonderfully muscular front.

When in training, he pulls the scales at about one hundred and fifty pounds, but when out of condition, weighs considerable more than that.

He commenced his career as an oarsman, at quite a tender age, and has not yet retired from the arena. Hamill's career, like that of every champion athlete, no matter whom, has been a series of triumphs and defeats, of which he may well feel proud, for he has never been defeated by any but a first-class oarsman.

He has beaten, intermittingly, Wolfe, Josh Ward and others. He still lives in Pittsburgh, from whence he is occasionally heard threatening to pull some one for the championship.

WALTER BROWN.

The name of Walter Brown has been prominently before the American people for a number of years, as an oarsman of superior ability, and his history contains a list of a great many victories, gained over some of the best oarsmen in America.

He was born in Madison, Greene County, New York, October 7th, 1840. He rowed at a hundred and fifty to a hundred and sixty pounds, and stood five feet nine inches high. His first race was in 1858, at Newburgh, and he and Edmonston won a double-scull race, against seven competitors, two miles in sixteen minutes.

He has defeated Ward in two races, and went to England, in 1869, intending to pull the champion English scullers, but forfeited his money in his first match, from indisposition.

Brown always pulled a very good oar, and has pulled in scores of races, some of which have been for large sums of money.

He died last month, (March 1871,) from the effects of a cold caught while attempting to clear the ice from in front of his Boat house, at Boston. His death leaves the single-scull championship of America without a possessor.

RULES FOR BOAT RACES.

ENTRIES.

RULE I.—The privileges of Entry shall be decided upon by the Committee in charge of the Regatta, who will settle upon the time up to which entries may be made. Regattas given under city auspices shall be open to all Local Clubs and Crews. The name of the Club or Crew, and the class of boat, is all that will be necessary to specify.

STARTING.

RULE II.—Sec. 1. The Start should be made by the Referee or a Starter appointed for the purpose; the manner of starting to be previously settled by the Judges. Before giving the word or signal, the Starter shall ask distinctly three times: "Are you ready?" If "No!" is answered the first time, he shall allow sufficient time for any adjustment that is necessary, and repeat the question. After asking the third time, he shall not wait for an answer, but give the signal, whatever it may be.

Sec. 2. Any Crew, starting before the time, shall be recalled and made to resume their proper place. After the signal is given, and the boats have started, NO RECALL CAN BE MADE.

POSITION—FOULING.

RULE III.—Lots shall be drawn to decide the position of each boat. The party winning first choice, selects what they deem the best position; those winning second, third, etc., doing likewise. A boat is entitled to any position which it can take and keep in a race. But, if after having taken another boat's water, the boat whose water has been so taken shall over-

haul and "butt" the boat which took it, with either boat or oars, and claim a foul, it shall be decided in their favor. When a boat leaves its own water to take that of another, it assumes the responsibility of keeping such position and is guilty of fouling, if collision occurs, even if by direct action of the other. If four boats are racing, and the third boat shall take the second boats' water, and the fourth boat, the third boats' water, and they two shall foul, the decision shall be rendered according to the water in which the foul occurred; if in the water held by the third boat, the decision shall be in its favor, or if in that of the fourth boat "vice versa." Complaints of foul must be made to the Judges before they shall give the decision or award the prize.

PRIVELEGES.

Rule IV.—In match races, the challenged party shall have the privilege of naming the time at which such race shall occur, and the course upon which it shall be pulled. The course shall be either with or against the tide, and shall be straight, or with a turn, at the option of the party challenged. The challenging party has the privilege of naming the class of boats to be used.

AUTHORITY OF JUDGES AND REFEREES.

Rule V.—Judges, unless they disagree, have power to settle all questions in dispute, in a race. Should they be equally divided upon any subject, the question must be submitted to the Referee, from whose decision there is no appeal. In cases where a collision or foul of two boats occurs, which shall be declared unavoidable and unintentional, the judges have the right to order a repetition. In City Regattas, the Judges may regulate all the conditions, and rule out any party for ungentlemanly or unbecoming conduct. There should be four Judges; two at the starting point, and two at the out stake. The Referee should be at the starting point.

TIME ALLOWANCE.

Rule VI.—It is usual for shell boats to allow lapstreaks a certain number of seconds in a race, which is a very just provision, as the former, without doubt, possess greater speed than the latter. The number of seconds to be allowed will, of course, depend upon whether both boats carry Coxswains; the number of extra oars, etc. Shells should allow lapstreaks eight seconds per mile, if equally manned. Boats pulling extra oars shall allow five seconds per mile for each oar.

CHAMPIONSHIP HONORS.

Rule VII.—The Professional Championship of the United States shall be de-

cided as follows: A party claiming the Championship shall be prepared to maintain the same, upon the following conditions: 1st. He is bound to accept a challenge from any citizen of the United States, within thirty days from the date of receiving such challenge, and to pull the race within ninety days from the same date, if the challenging party so desires. The time and place to be at the option of the challenged party. 2d. The challenged party has the right to name the amount of the stake to be pulled for; but the challenging party, if he so desires, may restrict the stake to the same amount won by the champion himself, when he achieved that honor. The champion is not bound to pull for a less amount than the stake at the match in which he won the championship. The challenging party must first deposit a forfeit of such amount as the challenged party shall require, so that it does not exceed more than half the stake, which the latter is obliged to cover, before any articles of agreement are signed. Each party shall then select two Judges, who in turn shall select a Referee. Either party may use whatever style of boat he sees fit, and is at liberty to adopt any and all improvements. The Referee must be selected ten days before the date fixed for the race. If either principal shall fail to appear upon the day of the race, he shall forfeit the full amount of the stake. But the Champion shall not forfeit his title if he can produce a sworn statement from some respectable medical practitioner, certifying that he was incapacitated by sickness from engaging in the contest. He is, however, obliged to accept a second challenge from the same party, and pull a race within ninety days from the date of the first race, provided the challenging party shall deposit a stake equal in amount to that forfeited by the champion. If the champion fails a second time to appear, the challenging party shall be adjudged to have won the championship and the stake. The challenged party has the privilege of making the course equal in length to that upon which he himself achieved the championship, and is not obliged to pull upon one longer.

ROWING ETIQUETTE.

Upon Racing Day, each Crew, upon coming up to the line, should salute th Judges and Referee; if in a shell, the Coxswain or Captain will simply raise his hat; if a lapstreak, the Crew should peak oars. When coming home, the victorious crew should peak to the vanquished, and escort them to their resting place.

During Practice, if Crews meet, they should simply exchange salutes through the Coxswains or Captains, who will touch hats to one another.

BOATING TERMS.

ALPHABETICALLY ARRANGED.

A

Astern—Behind.

Apron---Attached to the stern inside the boat, to which the middle and upper streaks are nailed.

Athwart---Across.

Amidships---In the middle.

B

Backwater---Reverse the action of Rowing.

Back-Board---This is what the Rower rests his back against.

Binding-Streak---The first plank put on a smooth work boat.

Blade---Flat part of the oar, or the portion which is dipped into the water.

Boat-Hook---An iron hook with a point on the back, fixed to a long pole, to pull or push a boat.

Boating---The act or practice of sailng in a boat.

Boatable---Navigable for boats.

Boat-Rope---Painter, a rope to fasten a boat.

Bow-Oar---The oar nearest the bow of the boat.

Breast-Hook---A knee fitted in at the bow, and secured to the gunwales and stern.

Button---The attachment which balances the oar in its place.

Buoy---Buoy is used as a stake.

By-the-Head---When the bow is lower in the water than the stern.

By-the-Stern---When the stern draws more water in proportiou than the bow, is not true on the water line.

C

Canoe---A boat formed of the body or trunk of a tree, hollowed out by cutting or burning. The Indians also make light canoes from small branches of trees and dry birch bark.

Coxswain---The one who steers the boat.

Crab---When the water catches the oar and turns its blade, so that the Rower cannot extricate it without much difficulty, it is called " catching a crab."

Crew---All belonging to the boat.

Crank---Easily overset, or thrown on one side.

Clinker-Work---When the lower edge of every plank overlays the next below it, like slate on the roof of a house.

D

Dash---The Rower using the utmost of his power to propel the boat.

Dead-Wood---Pieces put in where the keel and stem and stern post are united.

Dip---The blade of the oar in the water.

Dug-Out---Canoe.

Dory---A light flat-bottom row boat, with both ends raised, having nearly the form of a skiff.

E

Easy-All---Easing, or ceasing to row.

Easing---To cease rowing.

F

Fishing---Laying the ends of two pieces of timber together and fastening a third piece to both.

Feathering---Turning the blade of the oar from a perpendicular to a horizontal position.

Floor---The water-line model of a boat.

Foul---To run against.

Foot-Boards---Flooring ; loose boards placed inside the boat, running fore-and-aft, resting on the floor timbers between the footlings.

Footlings---Fastened to the floor timbers on each side of the foot-boards.

Fore-and-Aft---Lengthwise the boat.

Fore-and-Aft Stretchers---Pieces running fore-and-aft at the top of the foot-boards, acting as stretcher-braces.

Feather and Weigh---A style of stroke in which the Rower pauses momentarily, after taking his oar out of the water.

Futtocks---The ribs or timbers to which the planks are fastened.

G

Garboard-Streak---Fastened to floor timbers, and to the stem and stern-post, at the keel.

Give-Way---Commencing to row.

Gunwale---The inside strip fastened to the top streak.

H

Hogged---Curved ; the ends being lower than the middle.

I

Inclined Planes---Inclined Planes are used for lowering boats from the house into the water.

K

Keel---The principal timber in a boat, extending from stem to stern at the bottom, and supporting the whole frame.

Keelson---A piece of timber on the floor timbers over the keel.

Keelson-Board---Temporary or moveable floor, resting on the floor timbers.

L

Larboard---Left side of the boat.

Launch---The act of puttting a boat in the water.

Lap-Streak---Same as Clinker-Built.

Limber-Holes---Small holes cut on the under side of the timbers, to allow water to pass from the extreme ends of the boat into the well-hole.

Lower-Streak---Next above the shutter-streak.

Loom---That part of the oar between the row-lock and the handle. Square and round.

O

Oars---Spoon---Spoon-shaped.

Oars---Flat-blade.

Oars-a-Peak---Standing the oars up, with the handles resting on the floor of the boat.

Oarsman---A Rower, or one who impels a boat by means of oars.

Outrigger---Rowlocks standing upon a frame outboard from the gunwale.

Outrigger-Barge---Square stern clinker-built, etc.

P

Painter---A rope at the bow of the boat used to fasten it.

Port---Left or larboard side of a boat.

Pulling---Rowing.

R

Regatta, pronounced Regetta---A race between two or more boats.

Rudder---The instrument by which the boat is steered.

Rowing Open-Handed---Keeping the hands level with the looms, and always having a space between the latter.

Rowing Over-Handed---Having one hand and loom overlap the other.

Cross-Handed---Pulling the left scull with the right hand, and "vice versa."

Risings---A piece of plank fastened to the ribs inside, upon which the thwarts rest.

Rowing---The act of impelling a boat by oars.

Rowlock---That part on which the oar rests in rowing.

Rower---Oarsman, or one who rows a boat.

S

Scull---A short oar; when two short oars are used by a rower, one on either side of the boat, they are called sculls.

Sculling---Rowing with two sculls.

Scarf---To unite two pieces of timber at the ends, by letting the end of one into the end of the other and bolting them together.

Scag---The after part of the keel.

Scag-Band---A strip of metal protecting the scag.

Scewed---When the keel is crooked or curved.

Sheer---The longitudinal curve or bend of the top of a boat.

Stem-Band---A metal band placed on the stem of the boat, from the top, and reaching to the keel, forming the cutwater.

Stem---A circular piece of timber to which the two sides of the boat are united at the fore end.

Slings---Canvass or other supports for a boat suspended from the ceiling in a boat house.

Stern-All---Back all; to back water with the oars.

Stern-Way---The movement of a boat backward.

Stern-Post---The piece of timber erected on the extremity of the keel to support the rudder, and terminates the boat behind.

Sternmost---Furthest in the rear.

Stern-Chase---When a boat astern is trying to overhaul one in advance, the endeavor is called a stern-chase.

Stern-Fast---A rope used to confine the stern of a boat.

Ship---Placing the oars in the rowlocks.

Shoot---When the oars are in the water and the power of the rowers is applied, the boat receives an impetus which is called the shoot.

Shutter-Streak---Between the board and lower streaks.

Starboard---Right side of boat.

Stake-Boat---A boat moored at the end of the course, opposite the starting point.

Stiff---Not easily careened or thrown to one side.

Stowing---Replacing articles in their proper position.

Skiff---A light, flat bottom row boat, generally without a keel and raised at both ends. The bottom of a skiff would form nearly one-sixth of a circle. They are built in various styles in different localities.

Skeleton Boats---Skeleton boats are constructed for a certain weight, and are used as race boats. None others are skeletons.

Streaks---Planks; they form the outside, and on a smooth-work boat are placed in the following order, commencing at the keel: 1st. Garboard streak. 2d. Board streak. 3d. Shutter streak. 4th. Lower streak. 5th. Binding streak. 6th. Upper streak.

Stretcher---A moveable piece of timber, fixed across the floor of the boat for the feet of the oarsman.

Stroke---The sweep of an oar in rowing.

Stroke-Oar---The sternmost oar.

Strokesman---The man who rows the aftermost oar.

Stern-Sheets---That part of the boat which is between the aftermost seat of the rowers and the stern, usually in a barge or working boat, furnished with seats.

Swivels---Metal rowlocks, working on a pin inserted in the gunwales.

T

Thwart---The seat or bench of a boat on which the rower sits; the seat being placed athwart the boat.

Traveler---An apparatus by which one of the pullers steers a boat.

Thole---A pin inserted in the gunwale of a boat to keep the oars in the rowlocks when used in rowing.

Taut---(Webster spells it taught)---Tight, not slack.

Thwart-Knees---By which the thwarts are fastened to the sides of the boat.

Thole-Steps---A piece of hard wood fastened to the under part of the gunwale on the inside, pierced for the insertion of the bottom or table.

Top-Streak---Uppper streak ; the plank above the binding-streak.

Transom-Knees---Securing the gunwale and upper stretch to the stem.

Trimming---Trimming a boat is to balance it so that she will not wiggle.

U

Unship---Throwing the oars out of the rowlocks.

Upper-Streak---Top streak.

W

Water-Line---A horizontal line, supposed to be drawn about a boat's bottom at the surface of the water.

Well-Hole---A hole in the bottom of the boat to let out the water.

Whitehall Boat---See description.

Wherry---A shallow, light boat, built sharp at both ends, for fast rowing.

Wale-Streak---Gunwale.

Wash-Streak---The streak above the gunwale in which the rowlocks are cut.

Y

Yoke---A piece of wood or metal at right angles to the head of a boat's rudder, from the ends of which are lines by which the boat is steered.

LETTER FROM ROBERT FULTON.

CARLETON, ST. JONH, N. B.,
February 18th, 1871.

ROBT. B. JOHNSON:

Dear Sir—I received your letter of January 28th, and was surprised, upon reading it, to find that you had not received the particulars relating to our training and boat racing. I sketched the account myself, and left it with a young friend of mine, a lawyer, to copy and forward to you, which he said he would do.

However, as he has neglected to do so, I will prepare the article myself, and send it. Hoping that this will prove satisfactory, I remain,

Yours, truly,

ROB'T FULTON

The above letter was duly received, but the promised contribution has not come to hand in time to be inserted, probably, because Mr. Fulton has been so busily engaged in preparing for the Great Race of next summer, as to be unable to bestow the necessary time upon it. It is with regret that I close the work without a letter from the genial and generous hearted Stroke of the "Paris Crew."

R. B. J.

CONTENTS.

	PAGE
Acknowledgment,	4
Preface,	5
Exercise—Its Relation to Health,	10
Rowing as an Exercise,	27
Morality of Rowing,	33
Rowing—Ancient,	37
" Modern,	46
American College Races,	74
Carnival of College Sucklings,	80
Practical Rowing,	99
Contributions on Rowing and Training,	137
Training—Introductory and Historical,	182
" Practical,	195
" Amateur,	223
Digestibility of Food,	232
Troubles in Training,	235
Training not Injurious,	238
Boat Building,	245
Paper Boats,	247
Biographical Sketches,	257
Boating Rules,	261
" Terms,	264

PAPER BOATS

Have been rowed by the winners of NINETY RACES since their introduction in 1868, viz:—14 in 1868; 26 in 1869; and 50 in 1870.

For racing and training, they are preferred to those of wood by the midshipmen at the United States Naval Academy, by numerous Boat Clubs, and by numbers of the best Oarsmen in the country.

Our New Circular and Price List for 1871 is Now Ready, and will be mailed free on application by letter.

We have in press, and shall publish in April, our ANNUAL ILLUSTRATED CATALOGUE AND OARSMAN'S MANUAL FOR 1871, one Large Quarto Volume of 230 pages, printed in colors on tinted paper, containing fifty fine illustrations on wood, and four large folding plates, (12 x 40 inches.) strongly bound in muslin. Price $5.00.

BRIEF OF CONTENTS:

INTRODUCTION.—CHAPTER I.—General history of rowing as a means of physical training, in England and the United States, during the past fifty years.

CHAPTER II.—General classification and description of boats. Wooden and Paper Boats compared. General discussion of the details of Racing Boats.

PART I.—Detailed description of all the different varieties of boats, oars and sculls built by us, fully illustrated. Details of care and repair, cost of shipment, &c.

PART II.—Hints to oarsmen on rowing and training. Books to be consulted. Best boats for beginners and adepts. Hints on the organization of boat clubs. Copies of the Constitution and By-Laws of five prominent clubs in the United States.

PAPER BOATS.

(Brief of Contents—Continued.)

PART III.—On boat racing. Rules adopted by the highest authorities. Races won by Paper Boats, 1868, '69 and '70. Harvard vs. Yale, and Oxford vs. Cambridge races, and those of the most prominent Regatta Associations in the U. S.

PART IV.—Complete list of the Boat and Rowing Clubs of the United States and Canada, on the 30th of November, 1870, with full details of each Club, in regard to their officers, organization, Constitution and By-Laws, Boat Houses, Boats. Estimated value of property, and description of the course each uses for rowing.

PART V.—Plans, sections, elevations and descriptive details of Boat Houses, costing from $150 to $5,000, with bills of material and all necessary data for building purposes.

Our New Circular for 1871, gives the contents of each part in full.

☞ In consequence of the cost of this work, but a limited edition will be printed, one half of which is already taken. Those desiring it, should send in their names early. Subscriptions will now be received.

For further particulars, address

WATERS, BALCH & CO.,

303 River Street, Troy, New York.

Ingersoll's

Great American Boat

AND OAR BAZAAR.

(OUR BAZAAR, 159 SOUTH STREET, NEW YORK, WAS ESTABLISHED IN 1828.)

LARGEST AND CHEAPEST ESTABLISHMENT OF THE KIND IN THE WORLD!

Our BOATS have won more Regattas than those of any other Ten Builders in the United States. All kinds of SAIL AND STEAM YACHTS.

INGERSOLL'S METALLIC LIFE BOATS AND RAFTS.

☞ ONE HUNDRED BOATS ON HAND.

"At the present time, there are in this city Twenty Firms, engaged in Boat Building. Each of these Shops employs an average of three men, with the exception of INGERSOLL'S BAZAAR, where from ONE HUNDRED TO THREE HUNDRED men are employed. This is the Largest Boat Building Establishment in the World."—[From New York Commercial Advertiser.

WOODEN AND IRON BOATS OF ALL KINDS AND DESCRIPTIONS ON HAND AND BUILT TO ORDER.

STEAM YACHT FOR TEN PERSONS, SEVEN HUNDRED DOLLARS.